COMMITTEE WORKSHOP

BEFORE THE

CALIFORNIA ENERGY RESOURCES CONSERVATION

AND DEVELOPMENT COMMISSION

```
In the Matter of:                     )
                                      )
Implementation of Assembly Bill 868   ) Docket No.
(Davis, Chapter 398, Statutes of 2007) 07-HFS-1
                                      )
AB-868 Fuel Delivery Temperature      )
Study                                 )
_____________________________________)
```

CALIFORNIA ENERGY COMMISSION

HEARING ROOM A

1516 NINTH STREET

SACRAMENTO, CALIFORNIA

TUESDAY, DECEMBER 9, 2008

9:13 A.M.

Reported by:
Peter Petty
Contract No. 150-07-001

COMMISSIONERS PRESENT

James D. Boyd, Presiding Member

Karen Douglas, Associate Member

ADVISORS and STAFF PRESENT

Susan Brown, Advisor

Diana Schwyzer, Advisor

Gordon Schremp, Project Manager

Nicholas R. Janusch

ALSO PRESENT

John Siebert
Owner-Operator Independent Drivers Association Foundation

Michael A. Flynn
LECG

Kevin Murphy
University of Chicago

Thomas Robinson
Robinson Oil Corporation

Jay McKeeman
Pacific Oil Conference
California Independent Oil Marketers Association
Petroleum Marketers Association of America

Judy Dugan
Consumer Watchdog
The Foundation for Taxpayer and Consumer Rights

Dale Boyett
Boyett Petroleum

Carl Boyett
Boyett Petroleum
Society of Independent Gasoline Marketers of America

ALSO PRESENT

David Smith (via teleconference)
BP America, Inc.

Edmund E. Williams
Department of Food and Agriculture
Division of Measurement Standards
State of California

Kurt E. Floren, Agricultural Commissioner
Department of Weights and Measures
County of Los Angeles

John Eichberger
National Association of Convenience Stores

Ross Anderson (via teleconference)
Department of Agriculture and Markets
State of New York

Ernest J. Getto
Latham and Watkins, LLP

Ken Lake
Department of Food and Agriculture
Division of Measurement Standards
State of California

Tristan L. Duncan, Attorney
Shook, Hardy and Bacon, LLP

Prentiss E. Searles
American Petroleum Institute

I N D E X

P R O C E E D I N G S

9:13 a.m.

PRESIDING MEMBER BOYD: Good morning, everybody. Welcome to the Energy Commission and this workshop on the staff draft report of the fuel delivery temperature study. This is a Transportation Committee workshop.

I'm Jim Boyd, Chair of the Transportation Committee, and Presiding Member of same. And to my immediate right is Commissioner Douglas, the Associate Member. To my left is my Advisor, Susan Brown. To Commissioner Douglas' right is her Advisor, Diana Schwyzer.

With those introductions, just a few comments on the workshop before I turn it over to the staff. This is billed as a Committee workshop, however it's a workshop to receive public input on the staff's draft fuel delivery temperature study report, which report is required by Assembly Bill 868.

So the purpose of the workshop today is to -- which was well indicated in the notice -- is to obtain public and stakeholder comment on the staff draft report. This is not a formal hearing; this is a workshop. So we solicit and request free-flowing comment today as much as possible.

The makeup of this room makes it seem more formal than we intended to be, but it is a workshop.

The legislation, as you all know, directed the Energy Commission, in consultation with other agencies, including Food and Agriculture and the Air Resources Board, to perform hopefully a comprehensive study on fuel delivery temperatures, their effects on gasoline and diesel fuel volumes. And that was to include a survey of retail fuel dispensers.

The legislation requires the Energy Commission report back to the Legislature on our recommendations, including any recommendations for legislation, for legislative changes, if warranted in this particular situation, on the issues -- or I should say, one of the issues before us today is the question of whether consumers of gasoline and diesel fuel are being unfairly treated at the pump.

Another question is would the potential benefits to consumers of installing automatic temperature control equipment at retail service stations, or of establishing a new reference temperature, would those benefits outweigh the costs or potential costs to consumers, businesses and to government agencies at all levels in the said process.

So, our Committee is interested in a fair and balanced consideration of the issues and the options that were required in the legislation.

So, again, I say we're asking today for comments on the staff's draft report issued on November 26th, which presents their point of view on the costs of potential benefits and which report can, and undoubtedly will, be revised based on input received at this workshop today.

Commissioner Douglas and I certainly welcome your input today, but remind you that you have the option also of submitting comments in writing. And there's a deadline on written comments of January 5, 2009.

The Committee will consider all the information that's heard today, along with the written submittals by all parties. And also then consider any changes staff should make in their draft staff report before the Committee, itself, puts forth a recommendation to the full Commission for the Commission's consideration.

Let me assure you that this Committee takes its work seriously. We understand that the results of the study being done in California can certainly affect actions in other places, actions taken by the states. Even actions taken at the national level.

So, what we have to do here today and in the immediate future is important to lots of people in lots of places.

With that, I would ask if Commissioner Douglas would like to make some comments. And then we'll turn the workshop back to the staff and Mr. Schremp will lead off. Commissioner Douglas?

ASSOCIATE MEMBER DOUGLAS: I just wanted to briefly echo Commissioner Boyd in welcoming everybody to the Committee workshop today. We look forward to your comments. There's considerable interest in this report, and I think that's reflected in the participation we have today. So we look forward to hearing from you. Thank you.

PRESIDING MEMBER BOYD: Gordon, turn it over to you.

MR. SCHREMP: Thank you, Commissioner Boyd. Welcome, Commissioners, Advisors, ladies and gentlemen and everybody online. I'm going to cover a few housekeeping items before we get going with my presentation.

First of all, I have a mandatory statement to read. For those of you not familiar with this building, the closest restrooms are located outside these doors, slightly to your left. There is also a snack bar on the second floor, up the stairs under the white awning.

And lastly, in the event of an emergency and the building is evacuated, please follow our employees to the appropriate exits. So if you can keep up with me --

(Laughter.)

MR. SCHREMP: -- I'll be going over to Roosevelt Park across the street. It also says please proceed calmly and quickly, again, following the employees. Okay? Those are the main housekeeping.

We also have some introductions. I'm Gordon Schremp; I'm the Project Lead on this study. I've been at the Energy Commission going on 19 years now. I'm in the fuels and transportation division.

I'd like to introduce a few other folks

that have been part of our team, because, after all, this is a team effort. And if you could please raise your hand.

And that would be Sherry Stoner over there. And we have Gerald Zipay back here, raise your hand. And Laura Lawson and Paul Deaver is -- he's hiding out in the back there. And Nick Janusch. So those are all of the folks that have been on the team; have been working toward getting the product, multiple workshops, as well as the staff document, you have before you.

So I want to thank them for all their hard work, because, once again, without their participation we wouldn't have a document for you guys today.

Questions, I guess I'd question back to the Commissioners, is how would they like to handle questions. Would you prefer to have Q&A while the presentation is going on, or hold questions until the end of my presentation?

PRESIDING MEMBER BOYD: How would you like it done? This is a workshop, and my first reaction is to solicit interruptions. But, it's a question of how comfortable folks are. I think in a workshop setting if somebody has a question based on something that was just said, that's the time to ask the question, if you don't mind, Gordon.

MR. SCHREMP: In fact, thank you, Commissioner. That is actually our preference, to be interrupted. There's a lot of material --

PRESIDING MEMBER BOYD: Something about great minds --

MR. SCHREMP: Yeah. And I believe for the court reporter purposes, questions would have to be asked by coming to the center dais. Is that correct? Yes.

So, --

PRESIDING MEMBER BOYD: You need to be at a microphone, so feel free to leap up and race to the most close microphone there to get your question on the record.

MR. SCHREMP: And the sequence of questions we'd like to take certainly is questions from Commissioners or questions from the people here in the audience. Questions from those online on the WebEx. And those people are able to signal they have a question by raising their hand electronically.

And lastly, at certain junctures we will open up the telephone lines for people that are just phoning in to have a question. So we'll try to do that periodically as we get to some natural stops in the presentation.

So I think that about does it for how we intend to proceed today. And just to echo the Commissioner's comments, we look forward to your input and, you know, we depend on your input because, after all, all of you folks are in the affected industry and representing consumer groups that have a lot of expertise in your various areas. So that's what we'd like to hear today certainly.

Okay, hopefully everyone online can see this slide, and everyone can hear me. I've already introduced myself. We'll continue on our merry way.

Here are the topics we intend to cover today in their general headings. We'll go through the temperature and density information. We'll cover our benefit calculations. And we'll also look at the cost of this program that we anticipate under two different options.

We'll also look at what the cost/benefit analysis results are. Let me do this, this little dimmer. Can people see the screen okay here? All right.

And then we want to talk about what the circumstances might be for potential net benefits. And that's if you change some of the assumptions a little bit in the recurring costs. And then we'll talk a little bit about permissive or voluntary versus mandatory temperature compensation at retail.

And then there's some other issues associated with temperature compensation we want to touch on. And then we'll talk about some next steps, which I believe Commissioner Boyd has already talked about in general terms.

A lot of you have been following this issue for a number of years, and have been closely following our progress on the topic as we culminate it with this staff report.

But essentially the background for this is liquids expand and contract. That's no surprise. The petroleum industry recognizes this and therefore they have a reference standard of 60 degree by which they consummate wholesale transactions, to a large extent.

And earlier work has examined

temperature of fuel at retail locations. And the earlier NIST studies, which we've talked about before, show that there are some colder states, as well as some warmer states. And California could best be characterized as one of those warmer states. And that meaning on average the fuel temperature is above that 60 degree reference level.

We use certain units of measure in the study interchangeably. They're not meant to be the same. We use them in their proper context, but I'll just cover a little bit of vocabulary, if you will.

Gross and net gallons are terms you've heard, or U.S. gallons for gross, and you'll also hear petroleum gallons for net. So gross gallon, I think the main distinction is that that's 231 cubic inches regardless of temperature. So if it's a warm fuel, 231; if it's a colder fuel than 60, 231. That's the gross gallon. That's the type of gallon that's measured at retail in California.

Net gallons are those transacted at wholesale terminals are only 231 cubic inches at 60 degree Fahrenheit. There is a calculation, and

I'll get into this in a minute, that is undertaken to determine what the value or the cost of the load will be based on the temperature of the fuel at wholesale, but not at retail.

And I think there's been at times discussion about what temperature compensation might be. It's in some ways almost changing the size of the gallon being dispensed at wholesale -- I mean, excuse me, at retail.

And I think on the average that's correct. It would be a larger gallon being dispensed at retail on average. But I think the distinction is -- the important distinction is this is not simply as simple as a change to say the metric system, where you make a permanent change and the size of the gallon being dispensed at retail.

Temperature compensation at retail would result in a varying size gallon. The warmer it is the larger the gallon as measured in cubic inches. The colder it is, the smaller the gallon is, measured in cubic inches. So it's not as simple as going to, say, metric system.

And I think, as you would see in the metric system, you would always have a fixed quantity in terms of cubic inches because there's no compensation for temperature variation.

And I'll talk a little bit about the reference temperature example. And that is changing the fixed quantity dispensed at retail regardless of temperature. That's the Hawaii example.

As I mentioned at wholesale there's essentially a price adjustment, or final cost for load adjustment. There's a loading of the truck in gross gallons. There's a measurement of temperature and there is a density value that is either known or assumed for that loading event.

And then there's a calculation of what the net gallons would have been. And then that net gallon is multiplied by the posted net price. And so you end up with a total cost for the load.

At retail temperature compensation would not involve that type of calculation. Rather the devices installed at retail would measure the temperature and then adjust the quantity of fuel being dispensed accordingly. If it's warmer, a little bit larger, you know, units of gallons. And if it's colder than 60, smaller.

And so the cubic inches will vary being

dispensed for the loading event. And so what's being paid by the consumer is basically the net gallons at that point. So that's a volume adjustment.

So there is a difference in the distinction between the two types of temperature compensation.

There are -- temperature compensation does exist at retail in other locations. In Hawaii. This is one of the options examined in the report, and that's a new reference temperature.

Essentially in Hawaii they measured the fuel temperatures and they determined or settled upon an 80-degree reference temperature. And they said, okay, well, what would be the size of the gallon at 80 degrees. How much would it expand to. And that's almost 234 cubic inches.

So that all the dispensers over time were adjusted to dispense day-in and day-out 233.8 rather than 231. And so that's what was done in Hawaii.

So is there still temperature variation in Hawaii? Yes, there is. Sometimes it's warmer, sometimes it's colder. But Hawaii is, I think, more of a unique situation. It's a temperature variation that's much smaller in Hawaii because of its geographic scope is much more modest, as well as the proximity of service stations to sea level. There's no great geographic and change in altitude as there is in California. So, I could see why some people may have thought this was a good approach to take.

In Canada there was permissive or voluntary temperature compensation allowed at retail. This was able to come about by technological innovation in the late 1980s that reduced the cost of the equipment and made it more amenable to being installed at retail, retail dispensers.

And the fuel in Canada on average is colder than the reference temperature. And so retailers, early on, say, well, I'll invest in this equipment; it will change the size of the gallon or liter being dispensed, and be slightly smaller.

And so there were some early adopters, and as well as there's some advantage of dispensing a slightly smaller gallon.

There is no labeling requirement on the

big signs in Canada, but there is on the dispenser. So consumers could become aware that the temperature -- the service station had temperature compensation by looking at the dispenser, itself. There's a labeling requirement in Canada.

Belgium, more recently, has passed temperature compensation at retail, and is now beginning to be phased in at their retail stations. And that's for the existing stations. All new stations, I believe beginning this year, had to be temperature compensated at retail.

So we do have examples throughout the world where temperature compensation has been undertaken.

The objectives. The primary objective is does temperature compensation for the two options examined make economic sense. And that is do the benefits for consumers outweigh the costs to industry. Or do the costs outweigh the benefits. And so that's what we're supposed to look at.

And we examined those two options, we called them, one is ATC retrofit and the other is reference temperature, the Hawaii example.

And we have quantified benefits and costs and then looked at them over time in the cost/benefit analysis stream of ten years. So what we'll present a little later in these slides is the results of those findings.

And as Commissioner Boyd mentioned, the final step is to actually provide a revised Commission report to the Commission at a business meeting for a vote on adoption.

Temperature. I'll transition into a lot of the temperature work. Temperature sampling had been going on between essentially April 2007 through March of 2008. The county sealers, the individuals who inspect and certify, among other things, that the fuel dispensed at retail is properly calibrated. They were requested to, when they make a normal visit to a location, to take some temperature samples of fuel, as well as air temperature.

The Division of Measurement Standards has provided us with that dataset. We have used the dataset to do the analysis and come up with some statewide averages, as well as some variations in temperature that one might see at retail.

And although not all the counties had data representation, the counties that did were, in large part, the main consuming areas in the state for fuel. So that's why those counties are about 85 percent of the gasoline sales or gasoline demand, and thus 78 percent of diesel fuel. So I think an overwhelming sample representative of the state from a consumption perspective.

Three types of temperature measurements were taken. The air, the fuel stored underground in underground storage tank, and the fuel that came out of the nozzle.

Now, we talk about nozzles, we talk about prover. The prover is essentially the receptacle that the fuel goes in out of the nozzle that the sealers will use to determine if pumps are properly calibrated, by the amount of fuel that they measure and they compare to the reference marks.

So the prover temperatures were essentially, you take five gallons out of the dispenser, then you take another five gallons and that's where you take the temperature from.

So only about 20 percent of the time they would take a temperature when they made a visit. And there were no temperatures taken for mid-grade gasoline, 89 octane. And that's because in most locations there is no underground storage tank holding mid-grade because mid-grade is normally created by blending premium and regular grade at the nozzle. There are no mid-grade samples.

And we assumed, for the sake of this, for gasoline purposes, that 6 percent of the gasoline contained ethanol, when we did this.

This slide is just meant to show you the three different temperature locations. The air temperature is here. That's not the exhaust from the diesel truck, that's an air temperature. Prover out of the dispenser and the underground storage tank.

We did not obtain data in this collection process from tanker truck deliveries because it would only be a coincidence the tanker truck would be there when the sealer was making their normal rounds. So, we do not have that information at this point.

Here are the results of not only the earlier NIST work in these white boxes up here, an average of almost 75 degrees statewide. And then we have some averages from the dataset over the period I mentioned, April 2007 through March 2008.

You'll notice that the temperatures are lower. And I also have this line of arithmetic mean. We're just taking all of the temperatures, adding them up and dividing by the number of temperatures. There is no attempt to adjust for, well, that temperature's from a county that has a large demand for gasoline, and that temperature's from a county that has a very small. Are they weighted the same? No, they're not.

So we actually re-weighted the information and that's why you see in these yellow boxes the average statewide temperature on a weighted basis. It's 71.1 for regular. A little bit higher for premium. And a little bit higher for diesel fuel. And we believe this has something to do with the steadily increasing density of the fuel.

The coldest temperatures on average statewide were always in January. And as you can see, a little below the reference standard of 60 for regular premium gasoline. And in August, the warmest time of the year for fuel and ambient temperatures, over 82 degrees at a minimum. So a large fluctuation, but on average 71 degrees year-round.

This just graphically represents the month-to-month variation, the rise up through peak in August, and then decline to low point in January. And as you can see, the difference between sort of the hierarchy, if you will, regular is usually the coldest temperature; premium is a little bit warmer; and diesel is the highest.

These are just some more numbers. They're in your report. We just want to illustrate the fact that some locations, some counties had some pretty high average temperatures. From those, 80, almost 90 degrees in Riverside County for July, actually not even August. And some counties have pretty cold temperatures, Amador County 43 degrees in January.

And then there's some -- I'm sorry, 50 degrees in Butte County for the average. Lowest recorded temperature 43 degrees in Amador County and 102 degrees was the highest.

Now, some of you have looked through the dataset. We saw some datapoints that didn't make sense. Not very many, less than two dozen. Those are documented in our report in the appendix, which piece of information we felt should have been tossed out. There are only a couple of those. I think one was a 4 degree temperature that we thought was an oversight, especially I think it was in May. So don't know, cryogenic storage of gasoline is probably expensive. So we threw that one out. But we detailed what we did so that way people could replicate what we did with our arithmetic and weighted averages.

Same sort of thing for diesel, just usually a little bit warmer. But colder temperatures are a little bit higher and the warmer temperatures are even a little bit higher. 92 degrees for the month in Fresno in August, pretty warm on average. And 107 degree temperature in Riverside in July for diesel fuel. So that's pretty high.

As I mentioned, not all of the counties had representation, but the dominant consumption average for the state did have temperature representation for fuel.

And so staff looked at is there a relationship between what the temperature is just on a daily basis, and what the fuel temperature is at retail.

And so looking at the analysis, doing statistical analysis, which, of course, is also in -- the results of that are in the report -- we believe that there is quite a strong relationship between the average ambient temperature and the fuel temperature, the fuel dispenser or fuel prover temperature.

About 76 percent of the temperature variation for regular gasoline -- and 87 percent for regular and 76 for diesel is explained by this relationship.

So using that relationship we then populated the rest of the counties and months that had missing data. And actually the average, as I showed you on the previous couple slides, are the result of having populated all the counties with that information.

And so, like I said, 15 percent of the gasoline demand in those counties was estimated.

Yes, can you come up to the microphone, please?

MR. ROBINSON: Just a quick question, you can repeat it. Were any of the tanks that you sampled aboveground tanks, or were they all underground?

MR. SCHREMP: Question asked from the audience, were any of the storage tanks aboveground tanks, or were they all underground storage tanks. We believe they were all underground storage tanks that were sampled. But if there's some information that someone has now, or wants to provide to us following the workshop, we'll attend to that comment in the report. But I think that's our belief.

But, yeah, that's a good question, Tom, especially with regard to a very warm temperature in say, Riverside County of almost 107 degrees. Was that an aboveground tank sitting out in the sun. So, but I believe they were underground storage tanks.

These next two slides were just meant to illustrate sort of how close the estimation is for multi temperatures to actual data. And so this is Alameda County. And so you look at the slide and you go, well, the predicted temperature looks like it's a little bit warmer. So does your relationship show it's a little bit warmer. Well, yeah, for Amador County. But for Los Angeles County it shows it's a little bit colder. So this just goes to show that it's sometimes a little bit above, sometimes a little bit below depending on the county where we have the actual data for that county.

We also looked at does the temperature vary extensively from the point of being in the underground storage tank to being dispensed at the nozzle. In the summer does it warm up a lot; in the winter does it cool down a lot. You know, what kind of variation do you see there.

In the data you'll see that there are temperature differences because they go to the service station, will take a sample of underground tank and do the prover almost nearly at the same time. And so we've seen differences of up to 20 degrees. So that's a pretty wide variation.

But actually when you start looking at the data, pairing those up together, you go, well, most of those differences are fairly small; 70 percent are within plus or minus 3 degrees. And about 95 percent are within plus or minus 7 degrees, as illustrated by this histogram.

So you can see these three slides or these three sets of data, instances in the middle, that's 70 percent all within plus or minus 3 degrees. So there's a very tight grouping. You do have some outliers, yes, but predominately day-in and day-out, month-in and month-out the fuel is quite close to what the underground storage tank temperature is. The variation is not that much.

Diesel fuel, there is -- I guess the groupings are a little bit flatter and spread out just a little bit more; they're not as tight a grouping. But still predominately 85 percent are within plus or minus 7 degrees. So it's a very tight grouping, so not an extreme amount of variation occurring in any particular month or day.

Fuel density is, I think -- the reason we care about fuel density is fuel density is used to determine how much a liquid will expand or contract depending on changing temperature. And they use fuel density to preprogram software for the devices in Canada. So they have an assumed density for gasoline, one value; and they have an assumed density for diesel fuel, one value.

And so we looked at, well, would that value be appropriate for use in California. Would multiple values be appropriate for use in California. So that's why we wanted to look at density, and how much that would matter.

And so this result compares the California gasoline average is pretty close to about the U.S. average. And the Canadian, I point out, the reference standard that they use is the very far low end of the density range actually in Canada, about .73 mg/liter. So this is -- or g/liter, excuse me -- this shows the dispersion of density from high and low, as well as the averages. And shows the Canadian values outside the band, sort of outside the low end.

And then for diesel fuel the Canadian reference standard is pretty much smack in the middle between U.S. and California averages. California diesel fuel is slightly less dense than USEPA diesel used in 49 states. But looks like the Canadian average is pretty much right in the middle.

So, those two fuels, density for diesel fuel seems that's an appropriate level to use because it's sort of right in the middle of the average. The density for gasoline seemed to be a bit low.

We also looked at other densities and this was in the context of essentially alternative fuels. The Legislature required us to look and consider what will be the potential impacts of increasing renewable fuels, as well as the low carbon fuel standard being considered by the California Air Resources Board, being developed, I should say, that regulation.

And staff's take on that is that the concentration of low-level renewable fuel blends in gas and diesel will both rise over time. And the total amount of ethanol and total amount of biodiesel or renewable diesel will increase for a couple of different reasons.

The renewable fuel standard, the national standard, is driving the increasing use of ethanol in California and other parts of the United States. That's one driver.

The low carbon fuel standard is anticipated to result in increased use of renewable fuels. That's another driver to increase those concentrations.

So staff looked at that obligation, if you will, from the legislation as what would happen if those fuels increased. And so this is really a density issue.

So, I think for blends up to 10 percent

of ethanol you can come up with one gasoline, average gasoline, quantity. But it should be at 10 percent. But if there is going to be temperature compensation at retail, and there are sales currently of E-85, and we anticipate those will increase, that there should be a different density designation certainly for E-85. And that, as well, goes for B-100, or 100 percent biodiesel, pure biodiesel, because the densities are sufficiently different from that of gasoline or from diesel fuel in general.

I believe in Canada right now they allow to B-20 with the same density as diesel fuel. In fact, they have no different density standard for B-100. And so you use that same one for those locations that might have that.

MS. BROWN: Gordon, can I ask a question?

MR. SCHREMP: Yes, Susan.

MS. BROWN: What, in general, would be the impact of increasing ethanol volumes in gasoline on volume and temperature?

MR. SCHREMP: Not quite sure what happened to temperature. I'm sure there might be some slightly different behavior that ethanol might have as a higher concentration of ethanol because of ambient temperature.

But probably pretty close to gasoline. Certainly the density of the fuel will change and the energy content, or I guess the fuel economy one might experience will change.

For example, E-85 fuel, on a gallon of E-85 versus a gallon of gasoline say with 6 percent ethanol, there's about at least a 25 percent drop in fuel economy for that gallon of E-85.

And so there's a fuel economy difference, but that's how it's reacting in the engine, if you will. But the temperature might not vary that much.

But certainly because the density is different, much different than E-85, if you were to use the gasoline density when you did a volume correction factor, it would be incorrect.

MS. BROWN: So in general you can't say there's an upward trend in volume or a downward trend, as ethanol volumes increase over time --

MR. SCHREMP: Sorry, I didn't answer your question specifically. Yes, with regard to the use of ethanol, ethanol use in California is rising, has been rising. This year it's going to be above 6 percent. Next year we think the amount of ethanol in California on average will be over 9 percent, and close to 10 percent in gasoline.

So, yes, ethanol concentration is rising. And that's, at this time, driven by the renewable fuel standard, or RFS, on the federal level. But in the future those levels could go up higher, Susan, as a consequence of the low carbon fuel standard, which has not yet been finalized. So we don't quite know yet.

MS. BROWN: And the same question for biodiesel. As we get higher blends of biodiesel, do we have a sense of how the volume sold will be affected, or the size of the volume sold will be affected? Sounds like we don't.

MR. SCHREMP: Not associated with the low carbon fuel standard. And right now I don't -- the biodiesel blends are sort of mixed in with the renewable fuel standard obligations, and that's another way of meeting them. I don't have an answer for you right now, but we can get one for you, because of the RFS.

But I think the trend will be the same, Susan. There will be a continued increase in the use of also biodiesel in California.

PRESIDING MEMBER BOYD: Gordon, we're beginning to drift from the main theme here by referencing the low carbon fuel standard. And you did say that possibly that could have an effect on the volume of ethanol blended into gasoline.

But, as I understand it, under current ARB regulations there is a 10 percent cap because of criteria air pollutant concerns. And it seems to me highly unlikely that in the near term California will be changing that cap.

So, it does seem to me worrying about anything above E-10 is not something we have to spend a lot of time on in the near term, anyway.

MR. SCHREMP: That's correct, Commissioner Boyd. There is an effective cap for criteria pollutant purposes, vehicle warranty purposes. USEPA has been conducting some work on looking at low level blends that are higher than 10 percent, how might they affect tailpipe and evaporative emissions. How might they affect wear and tear on the engine, the operation of the engine. I believe the E-15 and E-20 levels.

And so will there be a higher cap possibly in the future, we don't know. So if

California does use more ethanol than say an average of 10 percent, that would have to be accomplished by increased sales of E-85 until that cap is raised. That's correct, sir.

Moving on to costs. And these costs, we expect that society, if you will, of the universe that would be affected by these costs are retail station owners. And the costs fall into how we have broken them down, three primary categories.

There is an initial cost of the equipment. It's going to require a certified technician to install and make sure the equipment is operating properly. And we've anticipated that there'll be financing required. I don't know if you can get any now anyway, that's a whole other matter.

But those are the three main components. So if you look at that, we've estimated in the low side $102 million statewide, one time. And $123 million on the high side, one time, initial cost.

And so if you portion that out and want to measure that in terms of gallons of gasoline and diesel fuels, about five- to seven-tenths of a cent for one year. That's the initial cost. Now, I'll talk a little bit -- I have a little slide on each one of those.

The reference temperature, the Hawaii example, does have a cost. And that cost is to go into the field and make an adjustment to that dispenser. So, it's now permanently dispensing a slightly larger quantity, 232.7 cubic inches rather than 231. So that would take a technician to go in the field.

And so we had a labor estimate of about $8 to $24 million for one year. So those are the initial cost estimates.

The fuel dispensers, to retrofit one requires a different type of retrofit kit depending on the attributes of the dispenser. So how many fuels does it dispense? Does the dispenser blend mid-grade or have a dedicated mid-grade tank?

And so, as I mentioned earlier, 70 percent of the outlets in California, as far as we can tell, blend mid-grade at the dispenser. And about 11 percent of the retail outlets have at least one mechanical dispenser. So there are still some mechanical dispensers out there. But over time those are being slowly replaced.

So, this table illustrates what the

estimated equipment costs are. Now, earlier on in our work, and in fact, something that caused us to stand the amount of time to do the analysis was we were endeavoring to identify exact make and model. Because early on our study that is how the dispenser retrofit kits were priced, make and model.

But recent developments by the industry that produces these devices has gone, like I say, evolved in the direction of universal retrofit kits. And the universal kits are priced according to how many fuels you dispense and if you blend or not.

So that, later one, made our work a lot easier. So then we just had to make sure we identified all these appropriate attributes for all nearly 10,000 locations in California.

So those are the average equipment costs values we used for this analysis.

The labor component. We looked at a low range of $60 and a high range of $70. We refer to these as fully loaded rates. The technician does not receive this wage. But that's of a sufficient level to pay for insurance benefits, and overhead for the company. So those are the rates we've used, and if people have some input please let us know if there is some better information out there, what we should use instead.

We talked to the people who do installation work. And we came up with essentially two technicians that work as a team most of the time doing this work. And if they're pretty good at doing this, it could be as low as an hour and a half to do a dispenser. And if they're just starting out, four hours a dispense.

So, those are the two. So we used the low wage rate and the least number of hours to get our low estimate for labor. So then you'll see that about $8 million to $24 million to retrofit all the dispensers. So you put that in terms of per station, it's less than $1000, up to $2500.

We also recognized that in some instances technicians traveling to the more rural locations of the state may require overnight stays. And so we've included some additional travel expenses. But as you can see, relative to the $8 million, we have an additional $300,000 that's actually embedded in there. And the $24 million, almost three-quarters of a million. So it's not a lot, but there is some -- there was some consideration about additional travel expenses.

There's a question in the audience.

MR. McKEEMAN: Jay McKeeman, California Independent Oil Marketers Association. It's our understanding that the technicians get paid for the time that they're traveling. So it's not just a hotel stay. It may actually increase the total cost of the labor involved for rural stations.

MR. SCHREMP: Okay, so essentially the time they leave the shop, if they're in the local area doing work during that day, until they get back.

So the question is would that result in increasing those rates, or is that certainly captured in the overhead. So, if you guys have some information on sort of what they charge, that would be helpful.

MR. McKEEMAN: I think it's the hourly rate that -- really I'm focusing on the rural stations. For rural stations it would not just be travel costs that are increased, it would be labor costs that would be increased, as well, for the rural stations.

MR. SCHREMP: So, in fact, if you're

traveling say four hours to a distant location, or six hours, that's all on the clock, --

MR. McKEEMAN: Right.

MR. SCHREMP: -- besides what we essentially have as overnight expenses on that last bullet?

MR. McKEEMAN: Right. I've got one more question, too, if that's okay? We earlier, at junctures in these workshops, talked about permitting costs. Did you take a look at whether change-out of temperature compensation, or, you know, temperature correction equipment would require a permit, either from the local air pollution control district or the CUPA?

MR. SCHREMP: We had no indications from AQMDs that that would trigger a new permit for the site. There is a higher fee associated with an inspector coming and certifying the device is properly working. But I know that's not what you're asking, Jay.

MR. McKEEMAN: Okay, but you did ask the question to --

MR. SCHREMP: To some of the AQMDs, the large ones. And do you know of other AQMDs that --

MR. McKEEMAN: I just was wondering if the question was asked, that's all.

MR. SCHREMP: Yeah. Yes, we have another question from the audience.

MS. DUGAN: Question, yeah. Judy Dugan from Consumer Watchdog. When you're talking about the mechanical pump stations, the rural stations and the low-volume stations all having these higher costs, there's so much overlap between rural, mechanical and low-volume stations, what happens to these calculations of per-station cost if you remove, say the 15 percent lowest volume stations from this?

And this is something we've discussed throughout giving a pass or a much longer timeframe, or some other benefit to these stations that are generally serving unserved areas and have a low volume of pass-through.

MR. SCHREMP: I think we've mostly, if not partially, addressed that, Judy, when we looked at --

MS. DUGAN: Yeah, I saw the partial addressing of it.

MR. SCHREMP: Yeah -- potential stations that might be at risk to closure. And that was in the context of impacts on fuel availability for a community.

So the other aspect of, say, a more urban center where there are some stations that have low through-put or predominately higher mechanical dispenser costs, we did not look at those locations as being, quote, at risk, as we did the rural locations. Because in those settings, the community would still have an adequate source of fuel available to them if there were some stations that they've closed. But we do recognize that sort of the disproportionate burden that might be on those locations because of their lower through-put and use of mechanical dispensers.

But we didn't completely address it in terms of identifying those at risk in the urban areas, no.

MS. DUGAN: Well, just I'd like to see, these outliers add so much per capita per station cost to your calculations, that if you were to remove the bottom 15 percent, I mean I have some other issues with the cost calculations, but I think John is trying to discuss them.

But I would like to know what that would come to. How much percentagewise that would take down the per-station cost.

MR. SCHREMP: We could certainly look at that calculation, Judy. I guess the question -- would you then be suggesting what would happen to those 15 percent of the stations if ATC were mandated. Would they be --

MS. DUGAN: Personally I don't care if they ever switch. The ones that are mechanical pumps are, when they finally change them over, probably going to get pumps that are capable of ATC anyhow, if we make them the standard.

I mean it's something that in many ways would cure itself over time. But frankly, the lowest 15 percent of input per station isn't something that we couldn't live without in terms of ATC.

MR. SCHREMP: Okay, like I said, we can certainly look at how the numbers would change if we did remove, say, a certain portion from the calculation.

MS. DUGAN: Great, thanks.

MR. SCHREMP: You're welcome. I think I'll transition, if we have no more labor cost questions. We made an assumption that the monies used to purchase the equipment and have the equipment installed would be obtained through short-term business loans.

In the high case the loan is paid back in one year, and in the low case those loans pay back over a three-year period of time.

We looked at a range of interest rates. That's discussed in the financing section of the report. Between 4 and 9.5 percent. On top of that we added a 2 percent of loan value fee for, you know, points and closing costs for the loan.

So, we effectively have an interest rate of 6 to 11.5 percent for our low and high.

And so we take that into consideration in looking at an additional amount of money for financing, about $10 to $13 million a year -- sorry, $10 to $13 million one year. But in the low estimate we prorated those financial costs paid out over a three-year period of time. But we show that in the report as a one-year total cost.

There are some recurring costs that would be -- well, first of all, recurring costs under the reference temperature option, there are none. Recurring costs under the ATC retrofit, there are three types of recurring costs. Higher inspection fees on a yearly basis. Higher cost for dispensers. And higher cost for maintenance of the ATC equipment only that we believe would be a consequence of ATC retrofit if it's mandated.

On a per-station basis, about $500 to $1400 per year, each and every year. This is a recurring basis. And if you prorate that over the fuel, it works out to be a rather small amount, two-hundredths to seven-hundredths of a cent per gallon.

In special fees we believe that the inspection process, when the county sealer goes to certify the accuracy of the fuel-dispensing device, will require a bit more time, about 10 to 20 percent increase in the time. So, if people think that's too high, or too low, please let us know.

And assuming that there's a cap on the fee of $1000, we're looking at $100 to $200 a year increase per location.

The last bullet on the inspection fee is the recognition that there is currently a cap in that fee system of $1000. And if ATC retrofit were to move forward at retail, we believe that that cap would have to be considered to be set to a slightly higher level to make sure that those additional fees could cover the cost for the county sealers.

If you're installing a new fuel dispenser or retrofitting a site and putting in new dispensers, in a post-ATC retail world, you'd have to buy one that's ATC ready.

So, staff looked at -- considered that as being, well, the cost of that would essentially be the higher incremental cost of the equipment. The labor is already captured in the device as it's assembled at the factory, so there's no labor component to that.

We do have an estimate of 500 to 550 new dispensers per year in California. We have had some people give us feedback on that number, doesn't that appear to be rather low. Well, yes, it does appear to be low, but these are actually over the last two years those were sort of the rate of new dispensers that were certified by county sealers on a statewide basis.

But, yes, it does appear low to us. If there are roughly 42,000 dispensers, and you're say replacing 7 percent a year, which is, you know, once every 15 years, you're going to be at a rate that's about 3000 dispensers a year. Not 500 to 550.

So, it's possible that the reason the number is so low based on the last two years worth of data is that the upgrades may primarily associated with the 1998 underground storage tank regulations resulted in a lot of, I guess, newer dispensers being installed. And so we're not at a sort of a natural replacement rate yet. That might be a higher percentage.

So, we'd be pleased for people to give us some information on maybe what some new dispenser or replacement dispenser numbers should be in California. If you have some information you can provide to us, that'd be great.

I think, at a minimum, we can look at, on the high end, a number that is more reflective of, say, a replacement rate of every 12 or 15 years, something to that effect. So please provide some comment in that area.

And as a consequence of that, the statewide cost, which is about $900,000 on the low end per year. For example, if you were at about I think 2900 dispensers, that would go up to nearly $4 million. So it is a marked change in the low estimate and would be a marked change on the high estimate, as well.

So, please provide us some input in this area for the recurring cost if you can, if you have that kind of information. But we do recognize that even though this is based on the last two years of data it may be a low rate for other reasons. Just not sure what those exactly may be.

How we figure out maintenance is we looked at -- we assumed that the equipment would need some maintenance. The ATC components would need some maintenance on a periodic basis.

And so the low end we assumed someone's going out, 10 percent of the retail locations require a visit. And that there's eight hours spent by the technician; they replace 25 percent of the ATC components at that location. So that works out to be a failure rate of about 2.5 percent per year.

So is that high for that equipment? Is that middle of the road, is that low? Too low? Don't know. But we believe, you know, that's sort of a conservative low failure rate for that.

On the high end we assumed basically a

fifth of the stations have a technician have to go to every single year. And 16 hours is spent in replacing half of the ATC components. So this is, we think, a fairly high estimate. And that's about $11 million per year statewide as a consequence. But it does imply a failure rate of 10 percent a year in the components. So that would probably be considered quite high for electronic components.

And keep in mind that these components, at a minimum, will have a 12-month warranty, in some cases 24 months. So if you see for the manufacturer they don't want to be making service calls on their own dime if you have high failure rates. So they try to get the failure rate down to a pretty low level.

So if people have some data they'd like to provide that causes us to change these estimates, please let us know.

Summarizing all these costs for retail station owners, this is just a laundry list, if you will, of the initial costs on the top four lines. And the bottom three lines, the recurring costs on an annual basis. So, up here these are all one-time costs. Down here, annual basis.

Now, as I mentioned, the new dispenser costs of $905,000 a year statewide. If we use, say, 2900 dispensers as the low end, then that's going to go up to about $4 million. So -- I think about $4.2 million. So that would rise rather significantly if you're looking at a total of 4.4 anyway for that number.

So any information you folks could provide would be helpful in that area.

The agencies, and in this case the Division of Measurement Standards, they would have some additional work if there was going to be some ATC-related activities at retail, either on a reference case basis or especially on ATC retrofit.

And those have to do with there's a development of regulations. They have to do what we've been doing now, conduct public workshops so they can take comment, write procedures. And so that's all sort of a staff burden, if you will. But we believe that's absorbable by the agency. And if they don't believe so, they can jump up and say something now.

Yes, we have a question here?

MR. BOYETT: Good morning, Gordon. Dale

Boyett, Boyett Petroleum. I think I can answer your low dispenser question, the 500 to 550 for the last couple years.

There's something called PCI compliance which has to do with the encryption modules, the card readers at the pumps. And Wayne and Gilbarco, which are basically the two manufacturers of dispensers, did not have one that comes out till the first of next year.

Like we were going to order 24 dispensers last year, and we chose not to because they were not going to be able to come without this module in them. And it has to be replaced by July of '10. So it would have been about a, I think about 2500 a pump to go back and re-do them for new pumps. So that might have a big factor. So, we just started ordering dispensers again.

MR. SCHREMP: Thanks, Dale. We assumed there was some reason that the numbers seemed to be pretty low. So, yeah, that makes sense why you might hold off and just wait a little bit longer to do that. Thanks for your comment, Dale.

Back to the agency costs. I mentioned that we believe there's some heightened activity that DMS would have to undertake, and we believe that's absorbable without additional funding or people years.

There's also another program where they certify equipment for use in California, fuel dispensing equipment in particular in this case. And we look at that as sort of a self-funding program. Meaning the equipment manufacturer has to pay to have that equipment reviewed and certified. And that may include even field test work for a period of time. And so if that's self-funding, then that's certainly a cost by the manufacturers in sort of a one-time basis for that particular make and model.

So, summary, the agency costs on an annual basis are something that -- since we don't have a quantity, and I think we have a -- Nick has a question online.

MR. JANUSCH: David Smith.

MR. SCHREMP: David? Are you live?

MR. SMITH: Gordon, can you hear me?

MR. SCHREMP: We can all hear you now.

MR. SMITH: All right. Is it okay if I ask a question?

MR. SCHREMP: Yes. Dave Smith from BP, right?

MR. SMITH: That's right. Do you know how long it takes to install ATC devices, and did you consider whether it was appropriate to consider like lost sales that would result during the installations?

And as you were talking about approval, did these things, do the devices, do they already have like UL approval for various fuels? Or do they need that or -- well, -- two questions.

MR. SCHREMP: Okay, I'll take sort of how long. Yes, we talked to some people that do this kind of work, Dave, and as I mentioned earlier, it's usually a two-man team operation. And if they're pretty fast and efficient and they have essentially the manifolds are pre-drilled for the temperature probe, it's about an hour and a half per fuel dispenser. That's you're looking at like maybe three products on each side, kind of typical dispenser.

Longer can be up to four hours. So that's sort of -- we did look at the time. So if, in fact, they're working on a dispenser at a site, and that fuel dispenser is out of commission for an hour and a half, or say four hours, I suppose there could be some lost sales for that particular location.

But, you know, we did not quantify that because it would be only one of the dispensers and only a short period of time. So, I guess, in theory, at some locations that are, you know, very active during the day and essentially has somebody at a dispenser almost all the time, I mean I'm sure there are some examples of places like that. Yeah, there could be an effect on that particular location's business. But I think on average the effect would be quite small. But, no, we did not quantify that.

Back to your approval of the devices that are ATC capable or ATC retrofit kits, if that case might be. I believe they have to meet all Underwriter Laboratory regulations when they go to DMS for approval. Unless I see someone -- no? Yes?

MR. WILLIAMS: That's a separate process.

MR. SCHREMP: Oh, Dave, I'm hearing that that would be a separate process for the Underwriter Laboratory would have to issue its own certification for a particular device. So, a separate process is the answer to your question.

So, I don't know how long that process is. If it's longer than the process to certify equipment through DMS, you know, that might be an adjustment in our timeline. So, no, Dave, we did not look at the UL approval process as a separate track or a, you know, a consecutive track or a concurrent track. We did not look at that.

But if you have some information, or anybody else does, on the UL process and how long that might be for equipment, we'd appreciate to be able to look at that.

Anything else, Dave?

MR. SMITH: No, Gordon, thank you very much.

MR. SCHREMP: You're welcome.

PRESIDING MEMBER BOYD: Gordon, question. Do we know if there are already certified pieces of equipment in existence?

MR. SCHREMP: There is a --

PRESIDING MEMBER BOYD: Ready to install, so to speak.

MR. SCHREMP: There is a -- we understand there's a ATC-ready fuel dispenser make and model that's already been approved by Division of Measurement Standards. I believe it is just one -- are there more at this -- just the one.

And I don't know if there are any of those ATC-rated make and models of that particular have actually been installed. And --

PRESIDING MEMBER BOYD: Is this one device compatible with all dispensers, or is it for a particular type of dispenser?

MR. SCHREMP: It's, I think, as Dale mentioned, you know, a lot of dispensers sold are, say Gilbarco's. And it's a Gilbarco make and model. So they would essentially purchase that make and model that already has temperature compensation capability.

PRESIDING MEMBER BOYD: Are these made domestically, or --

MR. SCHREMP: I don't know where Gilbarco produces their fuel dispensing equipment. I don't know. So I don't know if there may be, I think, Kurt, do you want to come up to the microphone, please, or ask -- go ahead.

MR. BOYETT: Hi, Gordon. Carl Boyett representing Society of Independent Gasoline Marketers of America. We've been waiting for a UL approval on anything selling more than 10 percent ethanol for two years now. Underwriters

Laboratory has not approved anything.

So, certainly for E-85 it would be fairly iffy at this point.

MR. SCHREMP: And, Carl, that is for E-85 dispenser you're waiting for UL?

MR. BOYETT: It's anything over E-10, they're certified up to E-10. But if you go to E-11, which basically this year the United States is going to E-10.6 overall. You know, people are selling it but they just don't -- they use their UL approval.

MR. SCHREMP: Okay. Thank you. Yes, Kurt?

MR. FLOREN: Good morning, Gordon. Kurt FLoren, Director of Weights and Measures for Los Angeles County.

Just to briefly answer that last question, Gilbarco's operations are located in North Carolina. And they are, in fact, fabricated there.

MR. SCHREMP: Thank you, Kurt.

PRESIDING MEMBER BOYD: Thank you.

MR. SCHREMP: Unless there are any other questions, we'll continue on with recovery of expenses is how we've couched this part.

Staff believes that, and this is important, I mean certainly important concept with regard to the cost/benefit analysis results. But the staff believes that the California retail stations do operate in a very competitive environment. And that they do endeavor to pass increased expenses through to their customers regardless of what those expenses might be. Say higher wage rates; higher rents for your property; a new regulation say of enhanced vapor recovery. Things of that nature.

So, there is an endeavor to pass those increased expenses through to customers by raising prices on goods that they sell. And those are both fuel and nonfuel items.

And the reason it's important to keep this in mind is because that has to do with how we believe the industry would react in aggregate to a change in temperature compensation at retail.

So we'll -- I'm sure there's presentations after mine that will touch on this, as well as questions -- right now.

(Laughter.)

MR. ROBINSON: Thank you, Gordon. Tom Robinson. I appreciate you recognizing that we do have a competitive industry. And I was just questioning does staff really believe that the Twinkie buyers are going to be able to subsidize these costs. And I think maybe even more importantly, aren't they also consumers? I mean, so effectively it's consumers that in some shape or form will pay for it.

MR. SCHREMP: Yeah, Tom. I think staff and some of the commenters will probably quibble and not necessarily just on semantics about, you know, can be recovered in nonfuel items and fuel items. You know, we certainly have an opinion on that, with that regard.

But I think in terms of your reference to society, certainly that's what this analysis is. We look at society, and society in this context is all the retail station owners and operators, and all the consumers that go to those locations. Primarily those are fuel consumers, but they buy nonfuel items at these locations predominately.

So, that's our society we're looking at. And you're right, you know, we look at the -- we believe that the costs or the expenses will be passed along to that society collectively.

And so I think with regard to is it all on fuel, is it some on fuel and some on nonfuel, that gets into, I think, more into some of the other types of things we looked at. But it doesn't change the fact that the impact is on society. But that's an important distinction to make.

This is, in part, one of the issues that Judy raised earlier. And we are concerned that if there is, in fact, an ATC mandated at retail that there could be some stations, especially in rural locations, that may have a disproportionate economic challenge. And this could be sort of the straw that breaks that camel's back.

So we want to be sure that if, in fact, something does move forward that there be some consideration to how to address those kinds of locations.

And it's couched in rural terms because, as I mentioned earlier in response to Judy's comment, that in the urban locations this is about fuel availability for consumers.

And so stations come and go, especially in the very urban station-dense area. And consumers will certainly notice that their favorite station is no longer there. They'll transition to another station. And that's certainly, you know, unfortunate news for someone who loses their business there, of course. But the fuel is still available for the community.

But in a rural location you may have one or two stores and that's it. So, if there's a loss to that store, then what does the community do for fuel.

So we understand those situations do come up. We understand that those stations close for other reasons, and those kinds of hardships are incurred by certain types of communities, meaning I have to travel much farther or plan my fuel purchases more carefully.

But we want to look and see, okay, how many stations might that be. And in the report you'll see a figure of no more than 450. And this was basically one or two locations in a community.

Now, so we have since looked at those individual stations and whittled down the number, if you will, by concluding, well, yes, there might be a couple stations right just in that community, but two miles away in the other community there are plenty of stations.

So, we've removed some of those, what we had deemed at-risk stations from that list. And Jay has a question here. And so right now we're no more than 200, and that might be slightly revised down just a little bit before we release the next version of the report.

But we just wanted to let you know the figure in the report now is not going to be 450. It's 200 right now.

Yes, Jay.

MR. McKEEMAN: Jay McKeeman, CIOMA. The location of these service stations, did you use your database on reporting of service stations to -- this is important information that I haven't seen teased out of a lot of information that I've been working with.

And it's actually pretty important information for a whole other issue, which is enhanced vapor recovery. And I'm just wondering, I'd like to talk to you and find out where this data came from. But could you just answer generally where it came from?

MR. SCHREMP: Yeah, I'd be happy, Jay. We primarily used, well, primarily used a survey mechanism. We have an annual survey requirement of the Commission, our E-15 survey, all retail station operators, owners/operators, must fill out an annual survey. So one page has lots of different information they provide.

We used that predominately. We also, because we don't have a hundred percent compliance yet, fairly high, though, I think close to over 80 percent compliance. We did use information from other sources, a list of locations by county sealers as another main source. And I think in some cases maybe an AQMD. But that was not very much information from them.

So, I think primarily the E-15, and then some county sealers to construct our database of nearly 9700 locations.

MR. McKEEMAN: Okay, thank you very much.

MR. SCHREMP: You're welcome. So when we looked at these, what we characterize as at-risk stations, we said, well, you know, what would it take, and this is sort of in part addressing Judy's question and concern, what would it take to say fund those locations.

And so we said, well, you know, be a little bit over $2 million for the 200 stations.

And that would, if you put a fee, for example, on fuel sales for six months, the fee could be as low as two-hundredths to three-hundredths of a cent for six months would generate sufficient monies for this program to retrofit those locations.

So that's just an example of how that could be addressed. And, once again, if ATC were to be mandated at retail. That's the only time you would look at that.

MR. SIEBERT: Gordon?

MR. SCHREMP: Yes.

MR. SIEBERT: John Siebert, OOIDA. Another option would be to just ignore them at no cost.

MR. SCHREMP: Thank you, John.

Okay, now I'm going to continue on with potential consumer benefits. And certainly there's been, I think, a lot of discussion about this issue, certainly in the press over the last couple of years. And we tried to be clear on how we interpret, you know, these potential benefits.

And we know that how the devices work; you'll get a little bit more larger size gallon, as measured in cubic inches in California. That's really how it works.

So the net impact of that is, well, then I didn't buy as many gallons over the year if I went back in time and did this. And then we have price elasticity response, all that kind of stuff. But, ignoring that because it's small in this context. You end up buying fewer gallons, fewer units, I should say, because they're down to net units.

So, good, I got a bigger gallon and I didn't buy as many, and so I saved that money. Well, if, in fact, the price of that, the posted retail price of that gallon didn't change. Well, we believe it will change. We believe that because the industry is competitive; the industry is currently profitable. We believe it will remain profitable over the future. That they'll endeavor to recover those, I guess, we refer to as a revenue shift, for lack of a better phrase. They'll attempt to recover that.

So, what will be retained by the motorist we think collectively from a societal perspective will essentially net out. It won't be anything. There'll be a complete recovery over the long term. And so we'll talk about that, and I know some speakers have different opinions on that. But we'll get to that.

So, that comes into play when we look at the cost/benefit analysis of what those potential benefit streams are over the years. And then compare them to the cost stream over the year.

So this is just a quantification of those units, or the process we went by to see how much larger the gallon would be, and how that shifts from gross to net with resultant fewer units sold. Different units, fewer units.

And that, I think, is quantified at 136 million, I call them gallons there, you can call them units. They're net gallons. And that's over the study period, April 2007 through March 2008. So essentially go back in time for the equipment and what would happen. And the value of that is contingent upon what the average fuel price is at the time. So change the answer.

You know, at the time we started doing this study I think the average fuel price for the study period is over $3.20. At the time we were doing the study this summer people thought that price was too low. And I guess now they think the price is too high. So that's all in a very short period of time.

Yes. There's a question?

MR. EICHBERGER: John Eichberger with the National Association of Convenience Stores. Looking at this number in today's market we sell gross gallons. We price based on gross gallons.

To calculate $438 million, am I right to assume that the staff used the calculated sale of net gallons based on temperature compensation sold at the average gross price charged last year? So selling net gallons at gross prices yielded you the $438 million during the study period, is that correct?

MR. SCHREMP: Actually we looked at how the equipment would have operated in terms of dispensing additional larger gallons as measured in cubic inches, what those additional cubic inches would have amounted to. And valued those additional cubic inches that would have been received by consumers.

MR. EICHBERGER: Based upon the average price charged over the study period?

MR. SCHREMP: Of the gross gallon, yes, that's --

MR. EICHBERGER: Which was a gross price.

MR. SCHREMP: That's correct.
MR. EICHBERGER: So I'm not quibbling with your 136 million gallons estimate on the temperature compensation effect. I'm just pointing out that when you calculate net gallons multiplied by gross price, you're mixing two measurement standards, which can create a incorrect estimation.
MR. SCHREMP: I think the economic valuation was on the additional cubic inches that would have been received as benefit. I'm just pointing out that another way to look at that is I would have purchased fewer units. And so the unit calculation is exactly the same as the valuation calculation.
MR. EICHBERGER: Assuming no change in price.
MR. SCHREMP: Assuming no change in price.
MR. EICHBERGER: Okay, we'll talk about that later. I just wanted to put that out. Thanks.
MR. SCHREMP: Thank you, John. So as you can see from these figures, most of the change from going to ATC to retail would be on the

gasoline side, and no surprise. That's the predominant fuel sold in California. And that's why the gallons are much larger because the temperature increase is somewhat similar.

So, what portion of this revenue won't be successfully recaptured? Well, I already sort of let that cat out of the bag and said we believe that the industry collectively will be successful, over the long term, in recapturing that, sort of that revenue shift.

So, yeah, I'll get my larger gallon, larger in terms of cubic inches. But I'll, in the end, pay for that essentially by paying both a higher price for fuel and likely a higher price for some nonfuel items.

So as collectively, as a society, it will essentially balance out, zero out from that perspective. So I know people have a lot of comments.

There'll be variations during the summer months. Certainly it's a little bit bigger in the summer months. In the winter months it's pretty close in some locations to the 60-degree reference, so there's not much change between the gross and net.

Yes, Judy.
MS. DUGAN: Is this right now our only opportunity to comment?
MR. SCHREMP: Oh, no, there'll be -- Judy, there'll be a period -- the question was is this the only opportunity to make comment.
No. This is one of the opportunities. There'll be some presentations following mine that people in the audience can also comment on those. There'll be a public comment period after that time and people can come up and talk about anything they want, including what's been discussed here. Or even have their own prepared remarks. So there are multiple opportunity, Judy, to come up.
MS. DUGAN: Then we won't impede you at this moment.
MR. SCHREMP: Okay, thank you. So we do talk about here that even though our staff's assumption is that there'll be success in sort of the industry as a whole as sort of recapturing, making themselves whole in terms of this revenue shift, this isn't, you know, it's not precise.
They don't know exactly what the temperature is at any given moment. They don't

know exactly what the temperature is being dispensed for every transaction at a retail station. It's imprecise.

But, in general, there's a recognition that they'll see a change in the revenue stream and they'll compensate to address that. And in the long run they'll be successful.

So, as a society we think that's why there's basically none of these expected consumer benefits from the slightly large size unit that will be -- or they'll pay for that essentially.

There is another type of benefit that's been valued for this publication. And we refer to it as information asymmetry. There is a discussion in the report, and as well as a economic discussion of how the benefit was calculated in the appendix that you're welcome to read through.

But essentially this is almost, it's correcting an inefficiency in the marketplace, if you will. Right now consumers don't have perfect knowledge on the temperature of the fuel and how that might affect the posted price.

They certainly have gasoline -- retail gasoline is one of the most transparent commodities there are in terms of pricing because everyone can see the big signs and that's the final price. No adders on top of that.

But variations in temperature do exist seasonally, and certainly do exist even in smaller geographic locations on any given day.

And so if consumers had better information on temperature they could make a more informed decision and likely purchase a slightly less expensive gallon if they were shopping just bottom line for price.

Yes. We have a question back here.

MR. MURPHY: Kevin Murphy from the University of Chicago. I looked at your appendix and I -- it wasn't clear to me exactly which variation you did the calculations for. Is that the average difference between the net gallon price and the gross gallon price? Or is that the variation over the year? Or is that the variation across stages? Because any one of those could have been used to calculate the number that you did.

MR. SCHREMP: I think I'll have Nick Janusch respond to that question, Kevin.

MR. JANUSCH: And so appendix R has a

figure that shows this, that weight loss. And the shift is the bottom correction factor, and that's the -- what we calculated as the average difference.

MR. MURPHY: That's like the 71 versus 60 calculation. Okay.

Also just one quick comment is normally half that figure would go to consumers and half would go to producers, because some of it's kind of the top half of the triangle and some is the lower half of the triangle. So for consumer benefits that really should probably be, given the calculations you made, half that number.

MS. BROWN: Can I also ask a question on that. You did quantify the consumer benefit of this part, did you not, in the report? I didn't see it on the slides. Can you elaborate further on the --

MR. JANUSCH: Okay.

MS. BROWN: -- amount of the consumer benefit?

MR. JANUSCH: When we calculated this benefit of price transparency as $3.2 million per year. And the way we calculated it, and I have to give sort of a mini-lesson in economics, but I'll try not to use econ lingo and keep to English.

Anyways, information asymmetry implies information about a product may not be equal on both sides of the market. So you might be buying something and you don't know exactly where you're going to get it. And once you get it, you might not be happy about it.

So, economists traditionally break down three types of goods when talking about information asymmetry. A search good, an experience good and a post-experience good.

A search good is a good where a consumer can observe the quality and characteristics before consumption. An example of this would be a college student trying to buy a notebook at a university. They can look at the notebook; see if it's colorful, they know exactly what they're going to get.

An experience good is a good where the quality is only observed during consumption. And an example of this would be movie tickets. And you might want to see a movie and you're not sure exactly if you're going to like it or not, so you can read newspaper articles and figure out the quality involved.

And a post-experience good is a good where consumption does not necessarily show the quality of the good. An example of this would be pharmaceuticals. And for those particularly, if there are no third parties that will actually give out that information or make that product more transparent, then government intervention, according to the textbook I cite, is necessary.

And because fuel is one of the many goods that we consume every day, but we rarely see; we can sometimes smell it. I would characterize this as a post-experience good.

And so the way I calculated dead weight loss. So, what happens with the information asymmetry is consumers will, might over-consume the goods that they're purchasing even though they might, if they knew what the quality of the good is.

And so this creates a inefficient market. It creates a dead weight loss. And the dead weight loss is the cost to society, and that includes both retailers and consumers. And I calculated that at $3.2 million per year. And that is basically under an assumption that -- and this is an extreme assumption -- that retailers are pricing the pricing fuel at net gallon price and selling it at gross gallon price. I mean, selling in gross gallons.

MR. SCHREMP: Was that a little bit more than you wanted?

(Laughter.)

ASSOCIATE MEMBER DOUGLAS: Actually I have a quick follow up question. The information asymmetry is an issue, and I can see how -- to me it seems like it's a more compelling problem if there is significant variation of the fuel temperature of fuel sold, say, by stations across the street from each other, or in the same small geographic location, as opposed to variations over seasonally or between larger regions, such as between Los Angeles and Tulare, for example.

And so I was hoping you could give us some insight into how much of this variation is this really within small areas?

MR. SCHREMP: The information we received from --

MR. FLYNN: Gordon. May I ask one question on that?

Didn't you say that to calculate your information asymmetry benefit or the benefit from ending that, that you were assuming that retailers were pricing at net dispensing gross gallons?

MR. JANUSCH: Yes.

MR. FLYNN: Isn't that the opposite of what you're assuming, or not the opposite, but isn't it the case that you are assuming for the remaining portions of your report that retailers today are both pricing and dispensing in gross gallons?

MR. SCHREMP: Actually I think it's they're buying based on net gallon prices. They are selling -- buying wholesale based on net gallon pricing, --

MR. FLYNN: I'm talking about retail, though, that's --

MR. SCHREMP: -- and retail they're selling based on gross gallon.

MR. FLYNN: And pricing --

MR. SCHREMP: It's a gross --

MR. FLYNN: -- and pricing on gross gallons.

MR. SCHREMP: Well, but --

MR. FLYNN: But I mean do you agree that if that's not correct, then the price asymmetry benefit for ending that dead weight loss is zero because there's no difference between the prices.

MR. JANUSCH: Yeah, so under the assumption that retailers are pricing gross and selling gross there is no dead weight loss, there is no benefit. But --

MR. FLYNN: Which is the assumption that you maintain elsewhere in the report.

MR. SCHREMP: No, I -- I mean I think as we've stated the purchase at wholesale, the purchase is based on a net gallon price. The purchaser can value the cargo or load of fuel any way they want. They know what the gross gallons are in the truck. They know what they paid for it. They can value the cargo any way they want. We understand that.

But they're buying net gallon posted prices. So, I mean as to the valuation of the cargo they can certainly do it any way they want. But at retail they are selling gross units, each retail transaction. And those posted prices for the consumer are gross gallon prices.

MR. FLYNN: Okay.

MR. SCHREMP: So, yeah. So I think there's, you know, there's net gallon posted in evaluation calculation for the load of fuel. They can certainly calculate the load of fuel with those dollars to buy it by those gross gallons.

They can do that calculation, but they're not buying gross gallons at wholesale.

MR. FLYNN: Right. But the information asymmetry problem is entirely at the retail level, is it not?

MR. JANUSCH: Yes.

MR. FLYNN: Okay. Thank you.

Yeah, I'm sorry. I'm Michael Flynn from LECG. I'll be talking in just a little bit, but I had not intended to address this section in my 20 minutes.

MR. SCHREMP: Thank you, Michael. Commissioner Douglas, I will still get to your --

ASSOCIATE MEMBER DOUGLAS: Absolutely. Take the comments first and then get to my question.

MR. SCHREMP: Okay, thank you.

MR. ROBINSON: Tom Robinson, again. To put it in perspective and see if I did my math right, but it's seventeen-thousandths of a cent. If I drive 12,000 miles a year, if my car gets 20 miles to the gallon, I buy 600 gallons. And is the net impact to me 10 cents a year?

MR. SCHREMP: The impact is quite small, yes.

MR. ROBINSON: So, I mean, the impact on this to an average consumer would be about a dime?

MR. SCHREMP: I have to check that, but if you have $3 million a year, and you have 30 million drivers.

MR. ROBINSON: Well, that's what I came up with, so -- you can check my math.

MR. SCHREMP: A dime is probably pretty close to the mark. Yes, Kevin.

MR. MURPHY: Yeah, just a reference to the question that Commissioner Douglas asked. I mean this calculation doesn't have anything to do with the variation across stations.

One could try to apply the same methodology to do that, but the numbers calculated here don't have anything to do with that comparison. It instead is a comparison of the .75 percent difference or whatever you want to call it between the 71 degrees and the 60 degrees, which isn't the variation that occurs across stations, which would be relevant for your question.

But the methodology, and again it would be 5 cents rather than 10, because half of it basically goes to the producer. So, we got to cut that in half, so.

MR. SCHREMP: Commissioner Douglas, to your question about variation in a particular smaller geographic area, say in the intersection of the temperature information for fuel that we have in the database as part of the county sealers sampling program, I don't think is sufficient to do that comparison since we don't have the physical location of the information. Other than that of a county location.

We do understand that there is some information that has been presented over this last year, associated with the National Congress of Weights and Measures. People have attempted to look at temperature fuel variability on a given day in a geographic region.

And so I have seen some information that does suggest that there is variation on a given day in a small geographic area, but we do not have that information to do the analysis in California.

Now, I do have to add, though, that there are instances where consumers are traveling a significant distance because of their daily commute. And they have options to fuel near their place of residence before they go to work, near where they work, and along the way.

And there are instances whereby you can certainly, especially in southern California, look at or even say, coming from the valley going into the Bay Area, where there are temperature variations that can be significant on any given day in that kind of comparison.

But we are unable to quantify, say, the number of potential consumers that might be experiencing that large difference in temperature variation on a given day.

ASSOCIATE MEMBER DOUGLAS: I'm not convinced though that a consumer who commutes from some cold mountain location into the valley and back really loses out whether they buy their -- because of fuel temperature differentiation by a decision to buy the fuel in the valley or buy the fuel in the mountains.

You know, I can see how a consumer who is attracted by lower prices on one side of the street than the other would definitely lose out if the difference in price is really reflective of the difference of the temperature of the gasoline.

But, you know, do you see that

differently? I mean at least if we think that the gross price reflects the actual volume being sold, then the consumers buying fuel where the air, where the ambient temperature and the fuel temperatures are higher are not necessarily worse off.

MR. SCHREMP: Well, I think it's, I mean I think it's back to the comment of, you know, did we perform this calculation evaluation. Yes. Did we come up with a somewhat small number statewide? Yes, we did. Is that number maybe double what it should be? Possibly.

And therefore, if there was -- could you see that number in the pricing at the pumps today? No, you could not because those posted prices are a tenth of a gallon -- excuse me, a tenth of a cent per gallon.

So, we're talking about differences that are even below that level to be noticeable. So, it is a very small benefit calculation that has been performed here. But would that make a difference noticeable to the consumer? Not at the level of pricing they have now to a tenth of a cent, no.

ASSOCIATE MEMBER DOUGLAS: Thank you.

MR. SCHREMP: You're welcome. Kurt.

MR. FLOREN: Kurt Floren, Director of Weights and Measures for Los Angeles County.

Commissioner, unfortunately the data that was collected statewide did not track that specific location information. But I can tell you, in Los Angeles, and unfortunately I do not have the data in hand with me, and it was on a very limited basis.

But I did ask staff to monitor several intersections specifically that had three or four stations competing right on those intersections. And this was very limited, I have to tell you.

But in evaluating that the largest difference that we saw in the same grade directly across the street from one another was 11 degrees. So there is that difference that's approaching, well, it's certainly over a half a percent difference. And so you can do the math there.

If it's a $3 gallon, a half a percent, you know, is going to be a cent and a half, yes? And so -- but I do need to make the point about this commuting issue, and I've made it here before.

And using Los Angeles County as an

example, we do have the high desert, Palmdale, Lancaster. We have the San Fernando Valley. And then we have the coastal region. And in our county we do have many many residents that do traverse those areas to commute every single day. A couple hundred thousand people come down from the high desert into the valley to work. And vice versa.

And I am convinced that people make fuel purchase decisions both near home and near work. Rarely in between unless they're running out of fuel.

But in the study that we did do, we did see -- and again I don't have this data in hand, but I know that we did see differences of the 20 degree variety from that high desert where it may be 105, and the San Fernando Valley where it may be 80 degrees or 75 degrees that day. And similarly for those people moving from the valley down to the coast, down to Santa Monica for the day's work, it can be 60 degrees there.

There are those kinds of ranges. And consumers do make purchase decisions between those different marketplaces.

So we have this ongoing debate on what

is a marketplace. Is it a single intersection? Is it a three-block radius? Or is it their day's experience, whether they're near home or near work?

And have to make the point that the temperature compensation issue or the automatic temperature compensation does do away with those uncertainties. Thank you.

ASSOCIATE MEMBER DOUGLAS: Thank you for that, that's really actually very interesting and very helpful. One quick follow-up question. Do you see -- before you run away back to your seat, do you think that the variation that consumers in that case experience really just impacts whether they buy gasoline in one area as opposed to the other because they believe it's cheaper? Or do you think it actually impacts them in terms of raising the fuel costs?

MR. FLOREN: Well, having been in the weights and measures business, if you will, personally for the last 23 years, and being a consumer, myself, there is a phenomenon, I guess is the best word for it, with fuel purchases that's not seen in a lot of other commodities.

What I'm getting at is the simple

observation that people really do line up to save 2 cents a gallon on fuel. It seems strange they won't drive across town to save 2 cents on a six-pack of Coke, but they will line up to save 2 cents on a gallon gas.

And I believe it's reflected in the report that the for instance when we were at $3 a gallon, and if there was a 15-degree difference like I've just described, that translates into a 3-cent-per-gallon difference in value when comparing the two.

And if a consumer is looking at two competing stations that are only 2 cents apart, and makes the 2-cent-less-per-gallon choice in making the purchase he's doing so believing that that's the better deal.

But if the temperature differences are vice versa, that consumer will actually experience a 1-cent-less-per-gallon receipt of value in making that choice.

And that, in my view, is really the bottomline about this entire issue.

MR. SCHREMP: We have two more people in the audience. We're going to have some questions. And then we have Ross Anderson on the phone who will go third.

MS. DUGAN: Hey, Ross, it's Judy. Just a followup on what Kurt said. This third level in balance, a little bit more about that. When you have that third level of imbalance and information, information inequality, it means that the consumer not only cannot find out the actual value of the product, the gasoline, because of the temperature of it, but they have no idea that they don't know. This is a blinker over consumers' eyes.

The value of taking off the blinkers and giving people who will cross the street for a 2-cent difference in the price of gas, the actual information that they need to make that decision, which is important in the way we conduct business in a society like ours.

MR. MURPHY: I just wanted to follow up because I think there was something said that was not quite correct, which is it is true that there is a value to information and the methodology that they generally laid out a valid methodology for assessing that.

But the statement that was made that just looked at the price difference, because if you look at their methodology it really matters, not just the price difference, but how much quantity changes.

And in fact, you know, that's why the numbers come out so small, because you have like a half a percent price difference, and it may be a half a percent quantity difference. And you multiply those two together. So that's .005 times .005, which is actually .000025. And it's a triangle, so take half of that.

And so you can see why the numbers come out so small that they do. So you don't want to say, well, it's half a cent cheaper here, it's a half a cent more expensive there. You have to go through the kind of calculations that they did.

And those numbers, once you run them through the proper economic calculations, is what comes out to be small. Not that there isn't a value of information, but you really got to quantify it, because the other things are real costs. And we have to kind of put things apples to apples in making our comparisons.

That's all I just wanted to add.

MR. SCHREMP: Thank you, Kevin. And just a moment before we get to Ross online, I just want to let people know here in the audience that the three people who will be making presentations after I conclude mine, copies of those presentations are available out in the entranceway. So I just wanted to let you know we now have hard copies of all those presenters' information.

Ross.

MR. ANDERSON: Thank you, Gordon. Just I wrestled with this cost/benefit analysis in trying to figure out what the dead weight loss really meant.

And I'd just like you to -- just in terms of a question. You estimated 117 million gallons difference between net and gross for gasoline, and another 19 for diesel fuel. Street value, well over $300 million. And yet your dead weight loss is $3 million.

Now my question is does that mean that retailers are 99 percent efficient approximately in getting to the correct gross gallon price for use at retail?

MR. SCHREMP: I don't think so, Ross. I mean the information asymmetry discussion, I think, is different than our valuation of consumer benefits of receiving slightly larger sized units. And that's, I think, the 136 million unit difference that we talk about, is not the same as the information asymmetry.

I don't quite get what you were asking, Ross.

MR. ANDERSON: Okay. So, I was trying to rummage through this as a noneconomist. You know, I was trying to wrestle with what does this -- the information asymmetry mean. And so what you're talking about is this very small little benefit of $3 million out of a multi-billion-dollar industry that we will improve by making this change. Is that a correct statement?

Because, you know, I think the point is when you look at tables 7 and 8 in your paper there, the numbers are so negative, you know, hundreds of millions of dollars in the red.

And can I assume that fixing information asymmetry never drives those numbers to the plus, never drives those numbers to where it would benefit the consumer? Unless you can show, by my calculation, that you have to have the information asymmetry a dead weight of 3 to 20 billion, or $20 million a year in order to drive that benefit above the line into positive numbers.

MR. SCHREMP: And, Ross, we're going to get to that in just a few minutes.

MR. ANDERSON: Okay.

MR. SCHREMP: And I will talk about a circumstance whereby you could see a slightly positive, you know, CBA result. I know you're talking about -- and that would be in the recurring years only, not in the initial year. But I'll get to that and I'll talk about that.

MR. ANDERSON: Okay. Then I'm fine for now. Thank you.

MR. SCHREMP: Okay, thanks, Ross. Oh, and here we are. This is essentially what Ross was referring to in the report. We have a couple of tables, I think 6 and 7, and this is the low estimate where we look at basically ten years. We look at an initial year we refer to as year one, and we have initial cost in the industry. So the devices haven't been activated yet.

$102 million, and so that's a large net cost. And about .5 of a cent per gallon for that year.

Then we have those recurring costs I discussed, over $4 million on the low side. And we have those information asymmetry benefits, that small amount. And, yeah, we've had some comment about well, it's actually half that number. Okay.

And we've also had some input on the recurring costs, maybe that's too low because of the number of stations receiving new dispensers. It's sort of an unusually low level right now. But we'll go up to a more normal replacement rate of maybe once every 12 or 15 years. So those numbers could also change.

But for the numbers we have in the report, if you do the comparison with benefits and the costs, you do end up with net negative numbers, I guess over $1 million a recurring basis. And that translates to a very small per-gallon net cost of -- that's six-thousandth of a cent per gallon. So, a million dollars, a lot of gallons. You get a very small cent-per-gallon valuation on that.

Now, looking on the high side, you see that the initial cost is slightly higher for that first year, .7 of a cent per gallon for the year. And then you have higher recurring costs and you end up with about $10 million a year on a recurring basis of net cost. And that's about a sixth of a cent per gallon.

So, can you -- is there -- will information asymmetry overcome those recurring costs? No, they won't. But I'll talk about how there could be some differences in terms of changing the assumption on the recurring cost that could end up with a slight positive. I'll get to that in just a minute.

But essentially the CBA results are looking at a negative result for society. So almost no matter how you look at it you end up with a negative result. And that's essentially because -- sorry, in the reference temperature it's -- sorry, let me go back to the reference temperature of the two options.

The initial cost, I don't have a table for it, is only for the first year. It's a small amount of money; it's four to 13 hundredths of a cent per gallon that first year before the adjustment for the dispensing device. There are no recurring costs, nor is there recurring benefits.

Actually information asymmetry is a very very very small part, and it's so small that we didn't include that in here. So, you essentially have, on a recurring basis, zero net cost on a recurring basis. So, you have just the initial year cost for the reference temperature example.

So, under what conditions could potential net benefits be positive for all consumers. These are in that society we talk about, retail motorists essentially.

And that is using the numbers in the report, recognizing that they will likely, based on comments, they will be modified, that if you change the assumption about what the failure rate of the equipment is, it's not 2.5 percent; it's actually about 1 percent.

Well, then that recurring cost amount would be low enough that it would be slightly below that of the information asymmetry valuation. So you end up with, for society, a slight net benefit. And by slight I mean $40,000 a year statewide. And that's two ten-thousandths of a cent per gallon if you want to value it that way.

So, these are very small numbers no matter how you look at them, on a recurring basis. This is not the initial year, this is on a recurring basis.

But, once again, based on some of the

feedback we're getting that the information asymmetry number is a bit too high, and that possibly the low recurring cost number is too low. Then there's likely nothing you can do in the assumptions to get to a positive on a recurring basis.

So, yes, Carl.

MR. BOYETT: Gordon, Carl Boyett, SIGMA. Does a 1 percent failure rate mean that they would fail once in every 100 years?

MR. SCHREMP: The rate we're using that that percent of the components that are failing every year.

MR. BOYETT: Okay, so that means that all of them, on average, would fail once every 100 years?

MR. SCHREMP: Yeah, I -- well, some would --

MR. BOYETT: At 1 percent --

MR. SCHREMP: -- some would last as long as that. Others --

MR. BOYETT: Well, 1 percent would be the average, would be 100 years.

MR. SCHREMP: Yeah.

MR. BOYETT: I question that.

MR. SCHREMP: Well, I don't think that's quite -- we're looking at --

MR. BOYETT: Well, if 1 percent failed each year, then 100 percent of them would fail in 100 years.

MR. SCHREMP: I guess so, but I'm -- I suppose that's right. I'm trying to think of it --

MR. BOYETT: It just seems awful small to me.

MR. SCHREMP: I think of it, it's back to in how they manufacture the components and how rigorous the components are manufactured to withstand being out in the fuel dispenser box in the heat and the cold. And to not have a failure rate where they're having to go out in the first 12 to 24 months on their dime and repair that.

So, at some point there's a tradeoff between how rigorous you build components to in the standards so they can withstand a long time --

MR. BOYETT: So maybe it means a 1 percent fail while it would be in warranty, and the rest of them would be on us?

MR. SCHREMP: Yeah, yeah.

MR. BOYETT: Okay.

MR. SCHREMP: Yes, Kevin has a question.

MR. MURPHY: If you go down that road is there a reason why you'd focus on the recurring costs rather than include the upfront costs which would still more than swamp the long-run benefits, right? I mean presumably we want to consider all the costs, both the upfront and the recurring ones.

Also, I would question the idea of whether the impact of a capital expenditure on product prices would all show up in the year in which the capital expenditure is made.

You know, somebody goes out and builds a gas station, they don't say I got to charge enough in year one to recover the cost of building my gas station. That's factored in as a capital cost component that's carried out over the life of the equipment.

I would presume the market would lead to that same effect here where you'd like to really take that year one expenditure and push it out, because that's how markets work, right? You don't recover all the costs of a capital expenditure, in this case it's going to last 100 years, in year one. You're going to spread that out. In which case I don't think even this change would change the bottomline. But the net would still be negative, so I just wanted to put that out.

MR. SCHREMP: Yeah, Kevin, you're right. You know, there's no -- the only reason we're talking about this recurring basis is, just to give an example, where on a recurring basis you could see a slightly net benefit result.

But, in recognition of some of the information we received just today, that it's now unlikely you can even see that on a recurring basis.

But, you're right, overall you look at the entire stream of years and you add up all of those cost/benefit differences, and you total them all up, net present valuation calculation, and you're right, even with this assumption of changing the failure rate, you would still be net negative. That's correct, on the low case and on the high case. So, you're right.

I think you'd have to essentially take it out to some ridiculous number of years to try to -- but I don't think, even at that small number, you could do that.

But, you're right, so overall it would be negative no matter what, when you add them all up.

Yes, Judy.

MS. DUGAN: I know there'll be more discussion of this, but the point is that I don't think everyone is going to accept the fact that 100 percent of the costs will be recovered in a competitive business like fuel market, that the assumption you're making is that first, that no cost will be absorbed elsewhere in the chain of supply. That no costs will be absorbed by the branded supplier of the fuels, especially true with branded stations.

That no cost will be absorbed by the brand in terms of switching out to pumps with automatic temperature compensation. That the assumption is that no costs will be absorbed by the retailer. And that no costs will be absorbed anywhere else along the line.

I think this is unrealistic in a competitive business. I think that especially in a vertically integrated business where there is a high involvement and interest all the way up the line of the supplier that there's every likelihood that some of the costs can be absorbed by the brand, both providing what are called image funds for the switchover. And possibly in repricing, by a fraction of a cent, their product.

Because there won't be transparency all the way up and down the line. And the interests of the brand is in keeping their retailers in business.

MR. SCHREMP: Thank you, Judy. And we did not consider looking at those expenses, even on a recurring basis or in initial year as being spread back up through the chain. No, we did not look at that scenario in this analysis.

But I think we do talk about, and I'll show it in just a few minutes, those slides about profitability of the industry over time, and how those profits have changed.

And so we are looking at a part of that chain with that information. And that information shows us that the industry is profitable, and the profits do vary. But they predominately have been positive. And we expect those to remain positive.

And that's been in the context of rising expenses for wages, labor, equipment modifications, credit card fees, you name it. And yet there's still a profitability. So, somehow the industry collectively is being able to pass along those expenses, so to speak.

But the example that you gave, no, we did not look further up the chain.

MS. DUGAN: I would hope that you would. I mean the industry doesn't stop at the apron to the gas station. There are relationships far up the supplier line that would have an interest in making this come out, you know, without damage to the retailers.

And there are much higher profit levels farther up the chain. When you get up to the vertically integrated oil companies.

MR. EICHBERGER: Gordon, John Eichberger with the National Association of Convenience Stores. Just a point of clarification. Ms. Dugan's comment about possibly the brand supplier absorbing some of the costs associated with retrofits, or providing some cost assessment, kind of misunderstands the relationship between branded suppliers and the branded retailers. There is no love lost between the two whatsoever.

Any financial assistance that brands provide the retailers is always recovered in the contractual terms. There is controversy right now regarding early termination of contracts, the recapturing of the lost profits by the branded supplier.

This is not a, hey, let me help you out, here's some money, go forth and prosper. It is, here is some money and now you're going to pay me back with interest. And the terms of your contract are going to be such that the branded supplier is going to get theirs and then some.

So any assumption that there's some benevolence on the part of the supplier to the retailer is completely false within this marketplace. Yes, it is competitive; yes, it is integrated. But keep in mind the integrated oil companies own fewer than 3 percent of convenience stores in the nation.

The majority of retail locations are independent owners and operators. More than half have branded contracts that they pay for. They pay a surcharge on every gallon they sell in order to recover any type of financial assistance they get from their suppliers.

So I just wanted to clarify that. Thank you.

MR. SCHREMP: Thank you, John.

MR. BOYETT: Dale Boyett, Boyett Petroleum. Probably the best way to help prove John's points is that right now we have something called EVR. That by April 1st it's an expense of about $50,000; has to be done by every station in California.

And currently about 23 percent of the stations are done. No fuel supplier is helping anybody do that. And all these stations that are not done will go out of business on April 1st.

So it is not the suppliers' problems, it is not their interest. They would say, you take care of your sector, retailers. And we have living proof of that right now. We're in the middle of it.

MS. DUGAN: And what's the cost per station?

MR. BOYETT: It's about $50,000 a station. And 23 percent, I believe, is the number by CARB as of what, December 1st?

MR. SPEAKER: November 1st.

MR. BOYETT: November 1st. And the suppliers are not helping out one bit on any of that, so. They have no interest in retail problems.

MR. SCHREMP: Thanks, Dale.

MR. SIEBERT: Gordon, John Siebert. Are you guys saying that you kill the golden goose?

MR. BOYETT: What?

MR. SIEBERT: You don't need retailers?

MR. BOYETT: We are retailers.

MR. SIEBERT: Yeah, the wholesalers don't need retailers. The producers don't need retailers? If you put them out of business they're not going to be there for the wholesalers to sell to.

Yes, you're going to take care of your retailers.

MR. BOYETT: Not according to historical examples.

MR. SIEBERT: So you put them out of business.

(Parties speaking simultaneously.)

MR. BOYETT: There will always be another retailer because there's always consumers. But you have to look at past experience for a lesson on future activities.

MR. SIEBERT: I'll read up on Machiavelli.

MR. BOYETT: Probably a good idea.

(Laughter.)

MR. ROBINSON: I think everybody wants to debunk this myth. We are 100 percent private brander. One reason we are that is because we look at the benefits that the majors provide the brand suppliers and we think that they get over-compensated for those benefits.

I think jumping to the conclusion that they're trying to put us out of business doesn't make any sense. The reality is that as we deal with costs through mandates or whatever, it just happens to be our challenge to take those costs to the marketplace. And in a competitive market if we're going to survive we have to be able to pass those on to consumers.

So the majors, the branded suppliers, the branded or unbranded suppliers, aren't trying to put us out of business, but they're certainly not subsidizing us to solve the various mandates we deal with. And EVR is a good example.

MR. SCHREMP: All right, we'll continue moving along here. And I'm sure I won't have any comments on this. Could there be some circumstances where some consumers could see a net benefit? And in the construct I have here, we believe so. But let's be clear. From a societal perspective you'll still see a net cost.

So, in other words, can there be circumstances in that society, in that group of consumers, some winners and some losers? Yes, we believe that can be the case. But, collectively, still in that cost.

So, this is just -- this chart is just meant to illustrate, well, under what changing conditions could you see slight, you know, net benefits as measured in cents per gallon. And that has to do with the amount of the, I guess the revenue shift recovery that occurs on the fuel, nonfuel, you know, what ratio. And in what value is the fuel being sold.

So, I guess now we're down in the lower part of the $2 a gallon range. And so under this construct, if 95 percent of the revenue recapture was just on fuel, and only a very small amount of fuel, you see a very very small net positive under this example.

If the revenue recapture was on 75 percent of the fuel and 50 percent on nonfuel items, you could be at a little over a third of a cent per gallon.

But recognize again that's for those fueling events where there's only a purchase of fuel. There's no subsequent purchase inside the convenience store, which, in California and the U.S., is about 80 percent of the fuel sales that occur to retail.

So, this is just meant to illustrate that those potential benefits for those fueling events vary according to price and vary according to how the station is trying to recapture that sort of revenue shift that would occur if ATC was put at retail.

So, but once again, from a net society perspective it's still going to be cost no matter how you look at it.

There's already been some discussion on the industry. I just wanted to point out, and this has to go toward staff's assumption of profitability of the industry and the sustainment of profitability into the future.

So, convenience stores are the predominant means of selling fuel in the United States, and in California, about 80 percent. There are hyper marts like CostCo. And you have some car lots that actually have some retail sales, and fuel-only outlets are those stations that only sell fuel. There are some still around. The nice stations with the attendant are -- those are all out of business, as days gone past.

The pre-tax profits for the national levels are about $33,000 a year over the last ten years. But they do range from a low of under $20,000 -- and this is on a per-station, per-year basis pre-tax profits -- and up to a higher level.

So you do see there's fluctuation. I'm sure if we looked at other industries we'd see other types of fluctuations that have to do in large part with the strength of the economy or the weakness of the economy.

Looking at the margins, gross profit margins, fuel, the low line, has been declining. And the instore, the nonfuel items sold, have been somewhat stable, but declining these last three years.

And so this shows you that there are various profit margins depending on the type of commodity being sold, and that there are some trends here.

We are not assuming that the motor fuel trend, for example, will continue declining down to that of zero, following this trend line out. We're assuming the industry will remain, as a whole, profitable moving forward, like it has in the past.

This just looks at the per-gallon margins on fuel. And I think, in some part, this goes to, well, expenses, capital expenses, well, that can only be, say, recovered in fuel alone.

Well, okay, if that's the case, then I would expect to see these margins going up over time to capture, you know, only get higher rents, recaptured in fuel. Only get higher wages. Only get enhanced vapor recovery, which hasn't occurred. And only get higher credit card fees only on the fuel.

We believe that the industry, and this being the retail station industry, has the flexibility to try to recover all sorts of increased expenses through both fuel and nonfuel good sales. And not limited solely to looking at fuel trying to recover those costs.

But further, we believe the industry will be successful in passing along these expenses in the long run. Yes, some stations, as John mentioned, might go out of business. New ones will come in. And even collectively in the United States and California even see a gradual decline of stations relative to the number of consumers, meaning stations are selling more fuel on average per location, fewer stations, more through-put. So that's certainly been a trend that also could continue.

Voluntary versus mandatory. This has been an issue. This is certainly the case in Canada. Permissive or voluntary is the way it is in Canada right now. You're not mandated to do that, but if you do temperature compensation at retail in Canada, you have to abide by the rules and regulations and procedures in that country.

But in California permissive or voluntary ATC at retail is permitted. You are allowed to have ATC at retail. As far as we know no one has installed and activated those types of dispensers. But it is possible.

Staff has concluded that if permissive - - well, staff has concluded that there need to be adequate, I think, safeguards, I guess is the best way to say it, for consumers that all of the different aspects of temperature compensation at retail be attended to, and say, you know, maybe a neater regulatory package.

We understand that from DMS has many standards, temperature compensation is something used at retail for other fuel types, gasoline and diesel fuel. They are very familiar with temperature compensation for those fuels. Procedures for testing those devices, and regulations for how long you can have temperature compensation operational, 12 months at a time at a minimum each time. You can change that.

So there are many of this laundry list of items on here that DMS either has current regulations or the tools at their disposal to address this. But not all of them yet, and not certainly in a neat package.

So I think from staff's perspective and our conclusion that permissive shouldn't be allowed until there is more of that for larger, more complete package, that permissive not be allowed. But there's differences of opinion on that certainly, but it shouldn't be taken that staff has concluded that permissive ATC retail should not be allowed. We're not making that conclusion. We're just saying that there needs to be a sufficient number of, I guess, primary consumer safeguards before that happens.

So, there's a question here?

MR. GETTO: Yes. Ernie Getto from Latham and Watkins. The first statement on this slide that permissive voluntary use of ATC devices in California is permitted because it's not specifically prohibited, we feel is erroneous.

California law clearly prohibits voluntary ATC at this time. We think that legal conclusion is beyond the scope of the mission of the Energy Commission in doing this draft report.

And rather than belabor the record now we're going to file a short memorandum with the Commission laying out this view. But it is erroneous. Thank you.

MR. SCHREMP: Well, I don't know if anyone else wants to respond. I believe that this issue came up during the spring, I think. And I think a request was made to DMS to prevent, I think emergency regulations to prevent the application of ATC at retail.

Is that -- that's correct. So I think this issue surfaced at the time. And I believe

DMS concluded that there's nothing prohibiting ATC at retail. Is that right?

MR. WILLIAMS: That's correct.

MS. DUGAN: What is the cite of California code for that? I'm talking about that it's forbidden, when you said --

MR. GETTO: Well, ATC, as described in the report, when implemented would (inaudible) --

MR. SCHREMP: Could you come up to the microphone, please?

MR. GETTO: -- would provide a variable gallon at retail. And California law is clear. I mean there are many provisions in play here, but one is the California law is clear that a gallon is defined as 231 cubic inches exactly, irrespective of temperature.

So, on its face ATC would permit or would have variable gallons being dispensed contrary to California law. And were a dealer to do that, he or she could be subjected to criminal penalties in the state.

MS. DUGAN: What's the cite on that?

MR. GETTO: I can give you that. I'll send you my memorandum --

MR. SCHREMP: I think, Jay, before you

go --

(Parties speaking simultaneously.)

MR. SCHREMP: Jay.

MR. McKEEMAN: Jay McKeeman, California Independent Oil Marketers Association. We did not retail Latham and Watkins, but we agree with their analysis.

On page 8 of the report basically establishes what California law stipulates. And in the third bullet it says, defines the unit of gallon as 231 cubic inches exactly. So I think that that's the cite that they're relying upon. And that's the one that we went to when we thought there was a problem.

MR. WILLIAMS: That's true.

MR. SCHREMP: So I guess we'll wait to see your information and address it at that future time.

There are -- oh, --

MR. SIEBERT: I'll just jump up.

MR. SCHREMP: John, identify --

MR. SIEBERT: John Siebert.

MR. SCHREMP: Thanks.

MR. SIEBERT: With OOIDA. You're asking for legislation to ban it. What's the inertia cost of having it banned by legislation because you're going to have to overcome something that has been -- even if we have sufficient standards, when would we know that we had sufficient standards to overcome something that's permitted now, but which you're recommending be banned?

MR. SCHREMP: I think there are a number of, as I characterized it, there's not, I guess I'd say, a clean section in the immense regulations one can go to to read about, okay, here's all how to provide, abide by to sell ATC compensated fuel for gasoline and diesel fuel.

And they're not clearly defined sets of procedures for, say, weights and measures officials to go out and check calibration on such a dispenser at this time.

It doesn't mean that DMS is unaware of how they would do that. It doesn't mean that DMS does not know what portions of their existing regulations that they can refer to that would also apply to retail ATC application of gasoline and diesel.

So, we're not suggesting that there's an outright ban. We're just saying that clarification and identification of all those.

And does that take a new regulation to put them all together? I don't know the answer to that.

But, it's say, not as clean as it is in, say, some other -- say Canada where it's pretty clear what the regulations are and you can go find those.

So I think we're not suggesting that there's an outright prohibition period in the discussion. We're saying there needs to be additional information and clarity with regard to how one would do that. And recognizing that we believe that it is a permissive now.

MS. DUGAN: You're clearly calling for a law to forbid it. That is your recommendation, right?

MR. SCHREMP: Unless these items are -- so, if that's --

MS. DUGAN: But who would --

MR. SCHREMP: -- unclear, we will change that. Yeah. Yes, Ken.

MR. LAKE: I just wanted to make a point of clarification. Ken Lake with Measurement Standards.

There are regulations that specify that packaged petroleum products are sold at 231 cubic inches at 60 degrees. And as well as other liquids are at 68 degrees and refrigerated liquids are at 4 degrees C.

That is in regulation, and it's also in the national model regulations. So, I'm not sure that that conflicts with law, but it seems like there is a precedent not to establish it at whatever temperature it happens to be.

There's also consideration against fraud by artificially heating fuels to expand their volume and sell them for an inflated gallon would obviously be an area of concern. So I'm not sure it's that cut and dried. I'm not an attorney, but our legal staff can probably respond to that issue.

MR. SCHREMP: So it sounds like we'll certainly be revisiting this topic in the report. So, another comment?

MS. DUNCAN: Yes. This is Tristan Duncan with Shook, Hardy and Bacon. We share the legal conclusions articulated by Latham and Watkins, and to the point that the prior speaker just made.

The maxim that you're relying on, which is if it's not specifically permitted, it's prohibited. I mean if it's not expressly prohibited then it's permitted is not actually applicable in the temperature compensation context.

And the reason is is because that maxim applies only when you have a statutory scheme that is silent on temperature compensation entirely. And as your speaker just pointed out, because temperature compensation already is permitted, both the wholesale level and for propane and in other levels of the energy field, that maxim doesn't apply.

Instead, the maxim that says if it is specifically permitted in one area of the scheme, it necessarily must be interpreted to be excluded where it is silent.

So, in this situation where you have temperature compensation silent at the retail level, that has to be construed as a prohibition, not permission. Otherwise you aren't doing justice to the legislative intent. The legislative intent is expressed in the statutory scheme, as a whole. And you have to read the statutory scheme as a whole, and you have to construe the silence at the retail level as a prohibition, not permission.

And so the point we make in our memo that we also will be presenting to the Energy Commission is that you are relying on an in-applicable maxim for interpreting the correct law. And that the appropriate rule of statutory construction is actually prohibition.

And so our point would be you don't need to amend the statutes to have an express prohibition. It already exists. And the California Supreme Court hasn't construed California law that way. And so we'll give you some California Supreme Court precedent, as well.

Thank you.

MR. SCHREMP: So I guess making it --

PRESIDING MEMBER BOYD: Gordon, I think there's a lot on the record on this point. I think there's no question now that staff is going to have to consult its own attorneys. So, I think we should let this question lie at that point. We have it in the record now. We will be receiving written comments, and maybe more possibly as a result of this discussion.

But I do think you have to turn to your own attorneys now for interpretation. Let's move on. We're an hour behind schedule already.

MR. SCHREMP: Very well. There are some other issues. If ATC were to be mandated at retail, and I'm going to cover three main areas. There's a longer laundry list in the document you can look at.

But it's basically labeling, will be the compliance schedule, if ATC were to go into effect at retail. And what about other types of fuels besides gasoline and diesel fuel that we've been discussing for this point in time.

So, if ATC is required at retail stations staff concludes that the information being displayed on the dispenser would be sufficient, and you wouldn't need information displayed on the big sign. Why? It's required everywhere.

If there's a voluntary or permissive system in California, then staff believes that large signs would provide sufficient information to consumers of whether or not that particular station actually had temperature compensation.

So, that's essentially some of the labeling issues out there.

Printed receipts. There is no

requirement in Canada for anything. And the staff has concluded that a message should be an option to put onto the receipt, but trying to put more information like, here's the exact gross gallons, here's the exact net gallons, here's the temperature, that kind of information is increasingly difficult to obtain.

It has to do with the software manufacturers of the ATC devices, and the software for the point of sale devices.

Over time it's possible that those kinds of softwares can work together so that kind of information could be put onto a printed receipt. But at this time that would be a very expensive proposition to try to attempt that.

And, once again, in Canada where they actually have temperature compensation, they do not require that kind of information on the receipt.

Compliance schedule. There are various simply three main aspects. There would be legislation that would obviously have to be written up, approved and signed into law. There are Division of Measurement Standard regulations and guidance documentation that would be developed. Those are workshops.

And then there is modifications to the existing dispensers, themselves, over some period of time. Because there are 10,000 locations.

So we talk about the compliance schedule for reference temperature because it contains those three steps. But it does not contain a step where you have to approve certain devices for use. Obviously because we're just making modifications, minor modifications to existing dispenser. That's about 18 to 24 months.

For ATC at retail the anticipated compliance schedule is a bit longer, one might say. About five to six years. And this, in fact, is a bit shorter time period than has been discussed at the National Conference on Weights and Measures.

There are a number of discrete steps in here. And a lot of these take time for regulation development, and a lot of time would be expended for manufacturers to obtain certification for their devices.

And then you got to put the devices in, and when you would turn them on would they be activated right away or not. That's in the report. We talk about that and address that.

So, it's not a quick process if that's where, you know, the state actually ends up going. It is a rather lengthy process.

There are other transportation fuels we looked at. Aviation fuel, staff concluded, should not be part of an ATC retail requirement due to the disproportionately greater use of mechanical and more expensive devices of a much lower through-put on average, that those aviation fuels, that would be aviation gasoline primarily, jet fuel sold at retail and some military fuel. Obviously probably exempt for federal reasons.

And also bunker fuel clearly is not sold at retail, so that would not be part of an ATC at retail obligation.

Last slide. There are some next steps. We have proposed comments be submitted to us until through December 19th. And if the Commissioners want to modify the time to submit comments, you know, they'll certainly let us know.

We will have a revised document at some point that we will then release to the public.

The next step, as we have laid out here, is to go to a full business meeting. And I think we're looking at a target of February 11 in 2009. And those are on a Wednesday.

And so will certainly be mailing out a notice in January. And we have a revised report that would go to that meeting.

We anticipate that following adoption that the report will be then delivered to the Legislature and the Governor's Office. The report, as directed by legislation, will contain recommendations at that point.

So, Jay.

MR. McKEEMAN: Jay McKeeman, California Independent Oil Marketers. In your notice on the meeting today it says comments would be accepted until January 5th. So I'm wondering, is that a change in the --

PRESIDING MEMBER BOYD: That's what the notice says, Gordon.

MR. SCHREMP: Oh, --

(Laughter.)

MR. McKEEMAN: I'm a stickler, okay.

MR. SCHREMP: Well, I guess -- since that's what the notice says, I guess that's -- I guess we're bound by that, I suppose.

PRESIDING MEMBER BOYD: Well, the

Committee can talk about it.

MR. SCHREMP: Well, I think -- we've received a lot of information. We'll receive more with the subsequent speakers today. We hope people will endeavor to provide us their comments, you know, suggested as whatever they might, as quickly as they can.

Staff will have to take that. We have to work with the Committee. We have to work to provide a revised document. So there will be some work there. So we're just -- but thank you for pulling that out. Okay.

That concludes my comments. And do the Commissioners have any questions at this point, or --

PRESIDING MEMBER BOYD: You caught us in the middle of a discussion. Your question was did we have any more comments, I believe?

MR. SCHREMP: Yes.

PRESIDING MEMBER BOYD: No. I think we should move right smartly along to the agenda since we're -- now, there is a problem. You say in the agenda lunch time, but we have three people scheduled to speak. Do you want to -- do any of these folks have travel logistics problems if we were to break now and come back in an hour?

Let's take a lunch break now, come back in an hour. Give you 15 minutes to beat the crowd.

(Whereupon, at 11:45 a.m., the workshop was adjourned, to reconvene at 12:45 p.m., this same day.)

--o0o--

AFTERNOON SESSION

1:00 p.m.

PRESIDING MEMBER BOYD: You know where to find Gordon anytime you need him.

MR. McKEEMAN: I do have his phone number.

MR. JANUSCH: He'll be here in about a minute.

MR. McKEEMAN: Okay. My name is Jay McKeeman; I'm with the California Independent Oil Marketers Association, and also today representing the Petroleum Marketers Association of America.

I'm introducing Mr. Flynn today as a person that brings some additional information to the, quote, "hot fuels debate."

During our participation in the various workshops, and our I need to define as the Petroleum Marketers Association of America, the National Association of Convenience Stores, SIGMA and NATSO.

During our participation in the previous workshops we were a little concerned that there were some analytical paths that weren't being explored quite thoroughly enough.

So we jointly retained Mr. Flynn and his firm to take a look at gathering some additional information. And his presentation today is offered in the spirit of providing mortar between the bricks.

We think the Energy Commission has done an excellent job of correctly analyzing that temperature correction is going to be a cost to society and to the consumer. We might argue with the definition or the articulation of slight in the report; and that's basically what Mr. Flynn's going to address.

But I do want to take this opportunity to really compliment the Commission and the staff for providing a level playing field for this debate. One of the things that was seriously missing in this discussion was a good solid analytical treatise on temperature compensation.

There were allegations, counter-allegations, benefit numbers being thrown around, cost numbers being thrown around. And we believe that the Energy Commission has really come up and helped focus the debate on the appropriate issues and the appropriate figures.

John Eichberger is up at the table from the National Association of Convenience Stores.

Holly Alfano is up at the table with NATSO. And I'll be sitting there.

We're there more to answer questions or provide some, I guess, reality points, because this discussion does tend to get into some serious economic discussion. So if we believe there need to be some touchstones provided, we'll chime in with those. But basically it's Mike's presentation, but feel free to ask questions of any of us. Thank you. Mike.

MR. FLYNN: What I'd like to do -- thank you, Jay. There was a couple of points that came up; during the earlier presentation today that I just wanted to touch on briefly, because I had kind of a limited agenda of points that I wanted to try and cover today.

I've been asked by the organizations that hired my firm to put everything into a whitepaper that will be made available to the Commission; then I guess through the Commission to everyone in the early January timeframe.

So what I'm talking about today are just a few highlights from what is expected to be a much longer and more comprehensive whitepaper.

But the two points I wanted to touch on

were, first, the question of the impacts on fuel availability and pricing that would ensue if retailers dropped out of the market.

Gordon discussed this as a potential issue, but felt that it was -- its import was limited to rural areas, or areas served by only a handful of retailers at most.

And what I wanted to offer was that this issue has actually been studied extensively by economists who do study and analyze the petroleum industry, and especially the retail end of it.

And what has been found repeatedly is that the retail prices in a particular area are a significant function of the density of stations in that area. In other words, the more stations per square mile there are in a particular community, other things equal, the lower are retail prices.

And what this means, the practical significance of it, is that losing any station has a non-zero impact on retail prices. The size of that impact does also depend on how many surviving stations there are.

But if a station drops out of the market that's not a problem confined to rural areas. It would raise prices, like I say other things equal, everywhere. And there's quite a literature on that. And I expect to cite to it in the whitepaper.

The second point, and the one that is more central to my approach to the CEC Staff report has to do with the speed by which retailers pass through increases in their costs to their retail prices or to their street prices, or pump prices, whatever you want to call them.

And this is an issue that has received considerable attention in the economics literature. And it goes by a shorthand that also has been picked up in government studies and others. And that's the so-called rockets-and-feathers debate.

And this is the shorthand reference to the repeatedly studied and documented phenomenon that when the costs of retailers, retail fuel stores, go up, they pass through those costs to their street prices with considerably alacrity.

And the question is at exactly what rate does this normally happen. And as you may have heard, in general the rule of thumb is that retail street prices will go up like a rocket almost instantly with any increase in especially fuel prices, the wholesale fuel prices.

They come down a little more slowly as competition at the retail level forces street prices to subside.

But this phenomenon has been studied extensively. If I can just offer a couple of the economists who have written on it repeatedly, Severin Borenstein, Rich Gilbert, who I've worked with a lot, John Zyren and his colleagues at the Energy Information Administration. And it's a pretty well established and generally accepted result in economics.

And the reason I harp on this is because it's at the heart of what I think you now perceive as the debate or the disagreement over how rapidly retailers will be successful in, quote, "recapturing" the revenue that in the initial instance they would lose if they were required to dispense fuel in net gallons, but continue to charge their previous gross prices per gallon.

And I just want to highlight the fact that this is not conjecture. It's been extensively studied. And in the whitepaper I will be referring to it.

My quick take on the CEC Staff report is that, as others have said, the staff should be commended for establishing that it's really difficult to make a compelling economic case for automatic temperature compensation.

And this is especially the case because retail competition in fuel markets, and this is competition that the CEC Staff report, itself, acknowledges exists. They have said that the retailers operate in a highly competitive environment.

And this is significant, and it's a touchstone for everything that I'll be saying today, and also for the analysis generally of this industry.

To an economist, highly competitive doesn't mean the kind of flamboyant rivalry that people think of when they see Hertz versus Avis, or Coke versus Pepsi. That's not competition. In fact, those are oligopolies that do earn supra-competitive profits generally.

Competition, as economists understand that term, means that the firms operating in such an environment are unable to earn anything more than a normal competitive profit.

What that means is that over the long

run their prices will be just equal to their costs, where one of the costs is the return on the entrepreneurship and the capital that are employed in the enterprise.

But they don't earn excess profits. And that's important because there's also another point of departure in the CEC Staff report from the kinds of writing and issues that got a lot of this started. And that's the so-called hot fuel ripoff controversy.

The alleged hot fuel ripoff profits are excess profits; its supracompetitive profits that allegedly retailers have been reaping from motorists and consumers for decades, and secretly hanging onto. And you can read the Kansas City Star and elsewhere about how much per year, in the billions, this supposedly amounts to.

It's important to recognize that the CEC Staff report does not have any finding about any such hot fuel profits or any excess profits whatever. As I say, it acknowledges that the retail industry is highly competitive, and a great deal flows from that.

Because it's so competitive, and because the market currently measures retail quantities in gross gallons, and then prices them in gross gallons, and because of the competition it is unable to sustain any above-normal profit, there really is no problem with the current performance of the California retail fuel markets that needs correction.

And in particular there is no problem out there that requires the imposition of automatic temperature compensation.

Net and gross systems of measurement are equally valid. There's nothing inherently superior about net measures over gross measures. They each are valid alternative methods that can be used to account for the same objective reality. As long as you don't mix them, in other words try to use units from one along with another to describe a particular transaction or state of affairs in the industry, there is no problem.

The main criticism I have with the CEC Staff report is that it is predicated on the unsupported and unsupportable assumption that were ATC to be mandated as part of the ATC retrofit discussed in that report, that retailers would be willing and able to dispense fuel in net gallons, but at their unchanged previous retail prices per gallon. And I'm using gallon in quotes now, because there's two different meanings of that term.

So, because there are no hot fuel ripoff profits, so-called, to be recaptured by the ATC retrofit mandate, it must be the case that the consumer benefits that are contemplated by the staff report have to be gotten by a significant reduction in retailer margins. There's no other place they can come from.

And remember those margins are no more than normally competitive to begin with. Nobody's earning any super-competitive profits. You're taking the return that a competitive firm needs to stay in business.

And this next one I can touch on just very very briefly. It is possible that the estimate of the cost of the ATC retrofit in the staff report is understated. But that's not a main topic of my concentration.

But it is important to notice that the $438 million annual benefit that the staff report suggests, at least initially, in the short and medium term, will be extracted from retailers, actually is greater than their total profit. And

I'm now relying on the figures in the CEC Staff report, itself.

It finds that the average convenience store has profits of about 33,000 a year. Take the 438 million annual benefit contemplated by the staff report, divide it by the 9700 retail stores in California, and you get a figure that's over $45,000 a year.

And just comparing those two figures you can see the incredible problem with the suggestion that retailers would acquiesce or even be able to acquiesce if they wanted to, to the switch to net gallons for measurement, but retaining their pre-existing prices per gross gallon.

This next slide is really just a setup, but it's trying to illustrate that the net and gross systems really account for the same objective reality. And they just do so differently.

And what I suggest, just look at the section for a hot climate. And this, and following examples, all start with a retailer receiving a load of gasoline at wholesale that in every instance will be measured in gross gallons. And we're assuming they fill up the tank wagon at

8000 gallons.

But because of temperature compensation the number of net gallons that the retailer receives will be less than that, as you see. And that's because of the different size in column C of the two measures measured in cubic inches.

Now, that load of gasoline, and this is going to be repeated in following examples, is assumed to cost the retailer $23,000. This is a made-up number, but it's a realistic number.

And so from that, depending upon whether he wants to measure it in terms of gross gallons or net gallons, a dealer knows his implicit cost per gallon for that load. And that's his cost. That's the kind of cost that he has to be able to cover if he wants to be able to stay in business in the long run.

And in these examples I'm always assuming that the retailers target margin is $1000. I'm not vouching for exactly that number, but it is in the ballpark; it's about 12.5 cents per gallon, something like that.

So that the retailer's target sales revenue from this particular load of gasoline is 24,000. From that it follows that there is a target retail price or street price that he needs to achieve in the long run if he wants to say in business.

Now, I'm not saying that he can set his price at that value and hit the mark exactly. That's not the way competition works. Retailers can exist for awhile below that figure; at other times they will have margins that exceed it. But this is the long run target that they need to achieve.

And just by doing the arithmetic, you see in this simple example that the retailer's target street price per gallon, gallon in quotes, differs depending upon whether he is thinking about his inventory in net gallons or in gross gallons. And it's that arithmetic fact that matters in the following examples.

I'm not sure how, to tell you the truth.

(Pause.)

MR. FLYNN: Doesn't seem to be behaving for me. Okay, I apologize, but I understand that these slides will be posted at the CEC website, as well.

The important thing to realize, and this is just building on the previous example, is that the consumer benefits anticipated by the staff report would come about through a significant reduction in retailer margins.

Because essentially what the ATC retrofit would accomplish, at least in the short run, perhaps medium term as viewed by the staff report, is that retailers would dispense, quote, gallons that are 233.4 cubic inches rather than the smaller 231 cubic inches they had been dispensing before. So that's a change.

But the CEC Staff report expects, looking at column F, that retailers will do so by continuing to charge that $3 per gallon that was the competitive price for a gross gallon. And the consequence of that is that they would be unable to earn that target $1000 in margin because they have fewer gross gallons to sell. That's what it means to have a net gallon, rather than a gross gallon.

And so rather than being able to generate $1000 in dealer margin, that margin would, in this instance, this example, falls by about 25 percent. And it's this mechanism that is at the heart of the scenario in the CEC Staff report.

So, just summarizing, the CEC Staff expects that somehow retailers will continue to price as they did for gross gallons, but dispense the larger net gallons.

And it's important to realize that this is different from the hot fuel debate, which claims that retailers have these secret supra-competitive profits that can be clawed back by an appropriately nuanced public policy.

There's no hot fuel profits here. It's coming straight out of the revenue stream that a retailer needs to survive. Because the staff report acknowledges, and I'm now repeating, that these guys operate in a highly competitive market.

And because they are in a highly competitive market their prices are not generating any of the hot fuel profits that are at issue in those other cases. And the CEC Staff report gets whatever consumer benefit it is able to achieve by assuming that retailers would acquiesce in an increase in their cost that is greater than their total profit.

Let me move through this one very quickly. The first point is I have no better information. The second one actually is my bad because I went through the CEC Staff report too quickly and didn't notice that, indeed, they do have an estimate for that issue.

But what I want to draw your attention to is the third item. There has been another state level official estimate of the cost of mandating automatic temperature compensation. And it's one that apparently was done by the State of Missouri in 2006. And it was referenced very late in the Government Accountability Offices report that came out in September of this year.

And I confess that that's all I know about it. I and my staff have gotten in touch with the State of Missouri asking for the details of this particular finding, namely that the State of Missouri estimates that it would cost $341 million to implement automatic temperature compensation in that state, a state that has 4300 retail stores.

The answer we got back is that they aren't providing any details, but they stand by that estimate, whatever that means. And perhaps the CEC Staff would be able to get more specific information, because I think it's important. The reason it's important is that if that Missouri estimate is valid, it strongly suggests that the total cost in California of an ATC retrofit would be more in the neighborhood of $700 million, rather than the much lower estimate currently provided by the CEC Staff, slightly above 110 million.

Let me go through this one very quickly because I've already given away my punch line. And that is that the CEC Staff report, itself, acknowledges that the pre-tax profits, mind you, of convenience stores in California average less than about 33,000 over the past several years.

And at the same time that 438 million in benefits distributed over the 9700 retailers in California comes to the annual average of $43,000 a year that would have to be transferred from each retailer to that retailer's customers for that $438 million-a-year benefit to be realized.

And I've looked at this number long and hard, and the only thing that I can conclude is that is a lot of Twinkies that have to be sold, or a hugely increased price of gasoline at these retail stores.

I think this one is -- we can go through very quickly. The critical issue in the CEC Staff report, however, is what they mean by the long term. Because they concede that in the long term retailers will successfully recapture all of that revenue.

But I have been unable to find in the staff report exactly what that long term means, or how it's defined, or when it starts. And that's important. But even more important is the fact that economists are unanimous, I'll say, you know, virtually unanimous, that at the level of retail gasoline stores, if you have an increase in wholesale prices per gallon because of a refinery incident, because of military action in the Middle East, or what-have-you, just think about your own experience all of the times that prices at the pump skyrocketed very quickly because of some news event or some refinery catching fire in California.

And ask yourself, how long did it take for that incident reported in the news to show up at the pump. And it's not months, it's certainly not years. What economists have measured quite carefully is that it's a matter of days or weeks, at most.

So the long term in the CEC Staff report really starts next week. It has to because this is a competitive industry and these guys would go out of business if they didn't respond that nimbly.

So I take strong issue with the idea that this recapture will occur only in the long run, or alternatively what has to be the case is that the long run, as I say, starts next week. And any notion that there will be a significant period of free money or free benefits for consumers until the retailers get their act together and recapture it is a fantasy.

And as I say, for proof just look at the literally dozens of incidents now that we have had in California of sudden increases in retail prices because of some incident in the industry that translates to an increase in the wholesale costs of retailers. They have to react immediately.

Now, I'm switching gears on you a little bit because what I'm moving into now is just a quick illustration of how it is that the current system, without temperature compensation, without an ATC retrofit mandate, does adequately adjust retail prices for the effects of temperature on both fuel volumes.

I take it that it is generally accepted that retail prices would respond or react very quickly if there was suddenly a change in the volume unit for measuring retail fuel sales.

For example, if instead of selling fuel in U.S. gallons, we move to the metric system and fuel would be priced or sold in terms of liters. No one seriously contends that retailers would continue to charge, pick whatever number is going on now, a buck-75 per unit, when the unit switched to liters, right.

And so the idea that retail prices adjust instantaneously so as to keep a retailer's total revenue constant in the event of a change in the size of the unit used to measure his sales of gasoline, ought to be generally accepted.

But the CEC Staff report seems to accept that. But then insists that somehow temperature variation is different. That rule doesn't apply. And what I want to emphasize, and will emphasize in the report, is that's not true. Temperature is just another way of measuring fuel in cubic inches.

And that's because, as I said here, and as I illustrate in this chart, there is an exact linear relationship between fuel temperature and fuel volume. You tell me the temperature and I will tell you, to whatever degree of accuracy you want, the number of cubic inches that a net or a U.S. petroleum gallon will occupy at that temperature.

In fact, if you tell me the number of cubic inches that a U.S. petroleum gallon is occupying right now, right here in front of me, I can tell you what the temperature is. You can go back and forth, one to the other.

In fact, look at this chart at the 60-degree mark and you see that obviously it corresponds exactly to 231 cubic inches. There's no magic in that.

So, because retailers in competition will always lead to an instant and perfectly offsetting or compensatory switch in prices to accommodate any change in the size of the unit used to measure retail fuel sales, so as to keep their target revenue constant, in this case the 24,000, it follows that, for example, and this is just one switch, if you go from a 231 cubic inch gallon to a 232.72 cubic inch gallon, which happens to correspond to the so-called California gallon at what is it, 71.7 degrees Fahrenheit, that has to lead to an increase in the target retail price. In this case it's about 2.2 cents per gallon, or per California gallon.

So, even though temperature is implicated in the change in the size of the unit, it gets analyzed like any other change in units that can be measured in cubic inches.

And this leads into the next-to-the-last point I want to make, and that is that retail competition already leads to appropriate adjustments in pump prices that offset the effects of seasonal temperature variation.

And just to be technical at this point now, what I'm talking about is the variation that was noted as a result of the California fuel temperature survey, and which is incorporated into the CEC Staff report. And that's this variation. That on average retail fuel inventories in California follow this seasonal pattern.

Right now I'm not talking about how much individual retailers might vary around that point on a particular date at a particular location. I'll come to that. But this is the variation I'm talking about, and that I am saying is already well handled by the current competitive retail environment.

The key insight to understanding how this happens is that the seasonal variation in fuel temperature, coupled with the force of retail competition, induces changes or forces changes in a retailer's target pump price per gallon that exactly offsets the effects of temperature expansion.

Let me illustrate. Now, we're going back to that same type of chart that I introduced earlier. Every month of the year the retailer receives his 8000 gallons gross. But because of the varying fuel temperature, the number of net gallons that he realizes from that varies, as you see in the one, two, three, third column.

Now, I'm going to assume that this retailer does get his wholesale loads measured and priced in terms of net gallons. But that's not always the case. Even the CEC Staff report acknowledges that, at best, only most retailers operate this way. Which I take to mean that a significant minority do not. But for the purposes of this example I will go along with that.

What the key point of this chart starts

now in the column that says the wholesale price per gross gallon. Because of the temperature, the effects of temperature, the wholesale price per gross gallon is varying. Now, that's not the most important thing. We're going to still add the $1000 dealer target margin.

Which enables us, when you add that to what the load of fuel costs measured in terms of net gallons and dollars per net gallon, you get a target sales revenue, which is the fourth column from the right.

That's what the retailer is aiming for. Again, I'm not insisting that he's going to be able to hit this every time. But that's his goal. And if he doesn't hit it in the long run, he's going to go out of business. He's not going to be able to sell more because competition won't allow him. He may be able to sell less for awhile, but sooner or later he would have to exit the industry.

So, even though his target retail price, expressed in terms of net gallons, if you wanted to work this out with a calculator, is always $3 a gallon. His target retail price per gross gallon varies, as you see in the next-but-last column.

And it's varying inversely with the temperature. That's critical.

And so as a result, as the temperature increases, and now I'm looking at the last column, as the temperature increases from the 60 degree that I started with in January, his target gross price per gallon falls. This is the inevitable, inexorable effect of retail competition and temperature expansion.

This is already in the current retail system. So his resulting target retail price, and this is the result I'm trying to get to, retail price per gross gallon varies inversely with fuel temperature.

So, when fuel temperature goes up from the winter into the spring and summer, and then declines, his target retail price per gross gallon moves in the opposite way.

And this is what I mean by saying that the current system already handles seasonal variation in temperature. And if you believe, as the CEC Staff report says, that retail gasoline sales are highly competitive, this is the result.

Okay, now I know that, you know, some would point out the fact that, well, what about the variation within a particular local market on a particular, you know, at one point in time. What about that variation?

And I refer to this as cross-sectional temperature differences. And we don't have a whole lot of data on that. The California fuel temperature survey did not attempt to go out and document the extent or severity of this problem.

So to do this last exercise in my discussion today I've drawn upon some examples that Henry Opperman included in slide presentations he gave to the National Council on Weights and Measures. Which showed the variation of retail fuel temperatures in the Topeka, Kansas area.

And what I'm going to show you is an example of what's called Monte Carlo sampling. I'm going to use this technique, and to imagine that you have 10,000 motorists, each separately buying 20 gallons a week, 52 purchases over the year, from randomly selected retailers in the Topeka area.

Now, the variation that I'm going to show you here in a second can be just as well thought of as the variation that a consumer would encounter if they kept going back to their favorite retailer.

And they get to that retailer at different points of time, or different amounts of elapsed time since the retailer got his last load from the refinery.

So, what you can do is create these 10,000 separate samples each containing 52 observations. And analyze them to see, based on this Monte Carlo experiment, how likely is it that a consumer going out and buying gasoline at regular intervals could wind up with annual purchases whose average temperature significantly exceeded the average temperature in that same market.

So, here are the actual temperatures reported by Opperman. Four different dates, all in the greater Topeka, Kansas area, and you see the temperatures that were measured. And what drives this is not the temperatures, themselves, but how much variation there is. In fact, people have been talking about that today, you know, that you go into a particular area and you can see as much as what, eight, ten degrees or more variation between the highest and the lowest temperature on that particular date.

In his January 8th through 12th sample, it looks like Mr. Opperman found a 15.5 degrees difference. The next one is 11.5 degrees. So you see that even in relatively colder periods you can see this variation.

So these are the 48 observations in my population from which I then construct 10,000 synthetic samples. Just have the computer go off and do it. Randomly choose among those 48 observations. Do it 52 times for each of your 10,000 assumed consumers. And what do you get?

You get this distribution. This is the distribution of the Monte Carlo results from this particular experiment. I've done the same experiment for consumers who go out and buy gasoline every two weeks; and I've done it for consumers who buy gasoline twice a week.

And the results are largely invariant, especially in terms of the dollars involved. And you look at this distribution and it tells you out of my 10,000 trials how many of them exhibited particular deviations, average deviations from the overall Topeka, Kansas average temperature.

So, just to find a number that's easy to read, look way over on the right. How many of my 10,000 samples resulted in a calculated average fuel temperature that was as much as two degrees greater than the Topeka, Kansas average. And out of my 10,000 the answer is one.

The important question is what's the probability that a consumer could wind up with fuel, his average annual fuel purchases, with a temperature greater than say 1.5 degree, or 1 percent of the total. And you just have to start adding those figures you see on the right. And keep adding till you get to 100. How far towards zero deviation do you have to go before you even account for 1 percent of the sample?

And I did this recently. It's somewhere around 1.3 degrees. So there's about 1 percent chance that a consumer buying gasoline once a week over an entire year would inadvertently wind up with the average temperature of his annual purchases that differed from the community average by 1.3 percent.

At gasoline at $2 a gallon, and this individual is buying 1040 gallons, it's not very much. It's just a couple dollars. And there's only 1 percent probability of that.

So, the bottomline is that the current market arrangements do a pretty good job of handling both the seasonal variation in temperature and the instantaneous or cross-sectional variation in temperature.

And that's all I'm going to have time for. Now, what will happen is that this, and the rest of my remarks, will be in a whitepaper that I understand that at some point will be submitted to the Commission, and then made available to the public.

Questions?

MR. SIEBERT: I've got a question for you guys down here. On 17, could you flip back to 17, the chart. It just so happens that 2007 was a really strange year.

So I went back for California and looked at it for the last seven years. And in two years it did some funky thing like this. But is this your normal pricing structure over a year? Or do you not see the prices peaking in August when the fuel is the hottest?

MR. EICHBERGER: That's a good point, John. And I think what you are seeing in chart 7 is not actual temperature observations. It is

Mike's calculated target price based on net billing terms at wholesale, and the calculated cost per gallon, to derive a $1000 profit margin per load delivered.

Clearly June, July, August, especially in California, gasoline retail prices are much higher than the first of the year.

What Mike's trying to demonstrate here is when the fuel temperature, as described in chart 16, when the fuel temperature increases that changes the calculated target price for gross gallons based upon the net billing terms to break even with the $1000 per load profit.

MR. FLYNN: In that same period. If you gave me a different temperature profile over a year, in fact I've done this for individual dates, you'll get a different impact on target retail prices.

Now, this is not to suggest that these are what wind up as the street prices, because there's lots of other factors that go into the determination of the competitive retail price.

And everyone is familiar with the fact that when you take all of these into account at the same time, that generally retail prices are higher during the summer.

But that's not because of the failure for the competitive mechanism to induce adjustments due to temperature. It's because of increased demand and other factors that lead to what, on net, are higher prices during the summer.

This is just illustrating the effect of temperature, which is what I think we're all here talking about.

MR. EICHBERGER: And if you look at all the examples Mike used, he's using standard numbers. He's using a standard 8000 gallon delivery at a standard cost of $23,000. So this is not a real world example, it's more of a theoretical exercise in terms of what the calculation would be between gross to net.

(Parties speaking simultaneously.)

MS. DUGAN: My point exactly. This is a theoretical exercise. This is unprovable without real world evidence.

MR. FLYNN: Well, actually it is provable, and here's how you prove it.

MS. DUGAN: It's provable within its own universe. It's not provable in the real world.

MR. FLYNN: No, here's -- and this is,

if I can editorialize for just a moment. And this is in comparison, in contrast to the so-called hot fuel profit theory.

People have been able to calculate the so-called hot fuel ripoff profits. You can pick up the Kansas City Star or read other blogs and so forth and they'll give you a dollar amount.

And in their mind this proves that these profits exist. And my rejoinder is, has anybody ever seen them. Has anybody ever gone out to the accounts and the financial statements and the tax returns of gasoline retailers --

MS. DUGAN: We'd love to do that. We would love to do that.

MR. FLYNN: Okay, I can give you some -- there's publicly available information, Judy. I can send some of it to you.

MS. DUGAN: By station.

MR. FLYNN: Not by -- well, yes, by station.

MS. DUGAN: Well, it has to be by station.

MR. FLYNN: It is by station.

MS. DUGAN: And it has to be a representative large sample of stations.

MR. FLYNN: There is. There's one that's called Risk Management Associates that publishes --

MS. DUGAN: That's above my pay grade to get that.

MR. FLYNN: I can send it to you. It shows you the profitability of individual retail stores each year.

MS. DUGAN: Over time.

MR. FLYNN: Over time.

MS. DUGAN: Compared to --

MR. FLYNN: Not necessarily the same store --

MS. DUGAN: -- is there a fuel temperature comparison in there?

MR. FLYNN: No.

MS. DUGAN: I rest my case. Now, can we -- it has to include that. And I will ask one question here. You say that, and I agree with you on this, at any particular temperature there is one and only one size of a net gallon of gasoline or diesel fuel. And knowing the fuel temperature is the same as knowing the size of a net gallon in cubic inches.

So, in effect, what you're saying is

that knowing the temperature allows you to determine the value of the fuel.

So why wouldn't we --

MR. FLYNN: No, that 's --

MS. DUGAN: -- want to know the temperature?

MR. FLYNN: No, you're missing the point there. The point of that is that adjusting target retail prices for temperature is no different than adjusting them for any other change in the size of the unit in cubic inches.

MS. DUGAN: Can we just stick to the way you said it here?

MR. FLYNN: Well, we --

MR. EICHBERGER: Mike, let me jump in real quick.

MR. FLYNN: Sure.

MR. EICHBERGER: I think what the basis of this whole thing is, yes, if you compensate for temperature the gallon size is going to change.

MS. DUGAN: Right.

MR. EICHBERGER: Okay. What we're saying is consequently the gallon price is going to change an equal amount.

So if you're going to change the volumes of the gallon by 1 percent volume based upon a 15 degree variation in temperature, the price is going to change 1 percent. Which begs our question, our conclusion is --

MS. DUGAN: How do I -- how do I confirm this as a consumer on the street with your nozzle in my tank?

MR. EICHBERGER: How are you going to calculate anything when you don't know the whole cost structure of the store? That's the whole thing we're talking about here --

MS. DUGAN: I can take --

MR. EICHBERGER: -- is that we --

MS. DUGAN: -- a shoe and look at the leather of it; I can check the heel; I can see the quality.

MR. EICHBERGER: Um-hum.

MS. DUGAN: I can say, this is Italian, this is Brazilian, that's Chinese. Every rubric of a shoe I can look at.

MR. EICHBERGER: But you don't know how much each of those rubrics cost.

MR. FLYNN: There's whole --

MS. DUGAN: I don't care if I know the quality of what I'm getting. What I'm talking about is the quality in value of what I am buying.

MR. FLYNN: But there's other evidence that retail stores are not generating and enjoying these kinds of profits. One of them is how else do you account for the fact that the majors, the supposed villains in this story, --

MS. DUGAN: I have never - I'm not even calling you a villain.

MR. FLYNN: No, no, but why are they getting rid of their retail stores if they are so profitable?

MS. DUGAN: Well, for one thing, they are not the most profitable end of the business. Obviously. Look at Exxon's bottomline. That is neither here nor there.

MR. FLYNN: But I mean according to the hot fuel ripoff stories, for example in the Kansas City Star, if you take those figures and divide them by the number of retail stores in California, according to the Kansas City Star every retailer in California, on average, is squirreling away $55,000 a year in nonfuel profit. Where is it?

MS. DUGAN: I did not -- I read that whole series and I, frankly, do not take that away from it. Where is that? Which part of it?

MR. FLYNN: All you have to do is go to that chart -- wish I had it here --

MS. DUGAN: Well, let's you and I --

MR. FLYNN: No, no, I can tell --

MS. DUGAN: -- talk about that later, but the point is --

MR. FLYNN: -- you, -- yeah --

MS. DUGAN: -- that you are saying, knowing the fuel temperature is the same as knowing the size of a net gallon in cubic inches. This is information that the retailer has --

MR. FLYNN: No, you're misinterpreting that point. I'm saying that there --

MS. DUGAN: I'm just reading it.

MR. FLYNN: No, I'm saying that there is no difference in adjusting prices for temperature. It's the same thing as adjusting prices for the change in the size of the volume unit in cubic inches. They're identically the same thing.

MS. DUGAN: This assertion is made over and over, but it cannot be proven without real life evidence. And I am here to challenge you, all of you who deal in gasoline, to give us the information to prove that.

MR. FLYNN: Well, the proof is -- it's

indirect proof, but the proof is that --

MS. DUGAN: No, no, indirect proof is not proof.

MR. FLYNN: The proof is that if what, if your take on this is correct, then these guys are rolling in money. And someone should have spotted it.

MS. DUGAN: No. I am saying that I wish to have you prove to me, with data, that it's from real life, that this is true.

MR. FLYNN: Okay, well, I'll try and do a better job in the whitepaper.

MR. EICHBERGER: Well, I think, I mean our bottomline is any change in cost that is incurred by retailers is going to be recovered. That's the CEC's conclusion; that's our conclusion.

MS. DUGAN: This is another loaf of bread over here.

MR. EICHBERGER: No, no, no. No, this is the bottomline. If there is no financial benefit for consumers from selling net gallons at net prices compared to gross gallons at gross prices, then the only cost or benefits involving the entire proposal is a cost of implementation, which will be passed through.

So, if we're looking at a situation where the end result is going to be an increased price to consumers, why in the world would we do this?

MS. DUGAN: First of all, the increased price to consumers is not a settled matter. I mean I do not agree that all costs could be passed through in a competitive environment.

MR. EICHBERGER: That's not quite --

MS. DUGAN: I do not agree that all costs would be paid by consumers directly. That there are other actors who could pay some of them. But let's just agree to disagree on that.

But the point is you do not -- there is value in knowing the value of what you buy. And today, even looking at that Topeka regression that you did there, the Monte Carlo -- I wish the Monte Carlo for my 401(k) had worked as well as yours.

But even on that you see higher bars on the upside than on the downside. And it is even, you know, it's not a perfect bell. So I mean it is pushing toward the higher temperature side on the number of people who bought at high temperature than at low temperature.

MR. FLYNN: Trust me, the weighted average of that Monte Carlo distribution is identically zero.

MS. DUGAN: Pardon me?

MR. FLYNN: The weighted average of that distribution is identically zero. I checked it. I wanted to make sure, myself, and it is.

MS. DUGAN: Okay, just that it certainly -- maybe it's just a less even progression. But the point is again you have made a theoretical point not based on real world behavior. And perhaps it's right and perhaps it's not.

MR. FLYNN: I think it would then be incumbent upon you to explain the mechanism by which consumers would go out and make their purchases over a year in a market and somehow manage to achieve a really skewed result, which is entirely not random.

MS. DUGAN: It could depend on where they live and where they buy. But the point is if consumers even knew in real time the temperature of the gasoline they were buying, they would be able to determine value. They would get used to it, they would be able to -- I don't care you do it, but let's make it fair throughout the system.

MR. EICHBERGER: So are you arguing that if we were to put on next to the price, the current temperature of our fuel?

MS. DUGAN: Yes.

MR. EICHBERGER: They would be able to derive -- hour, make an economic calculation in their head as to what the best value is?

MS. DUGAN: I know guys who can re-do the compression in their cars --

MR. EICHBERGER: Maybe two out of 1000.

MS. DUGAN: -- in five minutes.

MR. EICHBERGER: I mean we've done consumer surveys -- before. Out of 1200 consumers surveyed across the nation, 30 percent will drive ten minutes out of their way to save 3 cents a gallon. On that transaction they lose a buck-50. But in their mind, that's value.

MS. DUGAN: I --

MR. EICHBERGER: But we see now is --

MS. DUGAN: Maybe it's value in my mind, I don't know how much money you make --

MR. EICHBERGER: Well, they've got it down, they go, a buck-50, you lose a buck -- you lose $1.50 in transaction, it's not a valuable proposition.

MS. DUGAN: Most people make those decisions across the street.

MR. EICHBERGER: Okay, and they will turn left across the intersection to save 3 cents a gallon.

MS. DUGAN: Right.

MR. EICHBERGER: Because they think a gallon's a gallon, the same size. The same product they're buying.

MS. DUGAN: If they --

MR. EICHBERGER: You're proposing they --

(Parties speaking simultaneously.)

MS. DUGAN: Once they understood, once they understood the value of temperature the would also base their calculations on temperature. I guarantee you, car people are obsessive.

MR. EICHBERGER: I will conclude our comment to the Commission that we believe, as the CEC Staff report believes, there is no financial benefit to consumers from implementing ATC.

There are costs associated with the implementation. Those costs will be passed through, whether you calculate the nonfinancial benefit the way the CEC did, which we believe is underestimating the potential costs and the rate of pass-through, whether you calculate it on an instantaneous pass-through based upon a calculation of costs and target retail sale margin, you're going to see no financial benefit to consumers.

You're only going to see a pass-through of the financial cost of implementation, regulation and everything that is involved with an ATC scheme.

So, with that we are way over our 20 minutes.

PRESIDING MEMBER BOYD: Thank you for recognizing that. Mr. Siebert, you are next on the agenda.

(Parties speaking simultaneously.)

MR. SIEBERT: If you guys want to stay, you can stay. You can be my people.

MR. EICHBERGER: We're not leaving.

MR. SIEBERT: Well, keep close to a microphone.

MR. EICHBERGER: I'll stay here.

MR. SPEAKER: I had choices on the last one, but I didn't -- I was going to take it on his time instead of my time.

(Pause.)

MR. SIEBERT: While he's setting it up, we talked about the up-like-a-rock, down-like-a-feather. There was an instance where we had a storm out in the Gulf. In Kansas City prices went up a quarter a gallon that day.

And then the next week BP had a rusty pipe up in Valdez and they said it was going to cut 8 percent of the production. It went up another quarter. We were up 50 cents and neither one of those things were real.

If I were running a really big oil company I'd have a rumor department, because it results in real money. After Congress subpoenaed the pipe, all of a sudden it wasn't going to cut the supply 8 percent, it was going to be replaced that week and be done with.

Why the Missouri -- oh, I come from Missouri -- why the Missouri study hasn't been made public, and probably never will be, Ron Hayes runs our weights and measures department. And he is a member of the cabal in National Weights and Measures that is against ATC. And he will say that, but he will not support it. He won't bring it out and he won't publish it.

Oh, and the other part, I'm sorry, I'm sorry, but I made a note and I said, I'm from Petroleum Marketing, I'm taking care of you as you sleep, trust me.

Without consumers knowing some of this stuff it becomes -- consumers know a lot about a lot of other stuff.

Okay, I'm John Siebert. I'm with the Owner/Operator Independent Drivers Association. I thank the Commissioners and my fellow --

PRESIDING MEMBER BOYD: How many people belong to your association?

MR. SIEBERT: 160,000 independent drivers who own and drive their own trucks. They drive 110,000 miles a year on average. They get six miles per gallon. So they're buying 18,000 gallons. And at $3 a gallon, that's $54,000. At $4 a gallon that's $72,000. And at $5 a gallon, it's $90,000. And they do not have the luxury of not driving when the price is high because it's part of their business. They have to do it.

I don't know if I ought to do this, but in light of full disclosure, I am an employee of the Owner/Operator Independent Drivers Association Foundation. I am paid $61,000 a year. I have not had a raise in the last three years; won't get one this year. And I've had a $1000 bonus. Anybody else that comes up that would like to talk and tell how much they're making off hot fuel from being retailed by coalitions who are diametrically opposed to its adoption in the public realm, feel free.

Let's see. The report leaves some questions that were asked by the Commission unanswered. It raises new questions about the methodology. And has some conclusions that contradict earlier sections of the work. And then accepts assumptions that aren't supported by real world practices. And primarily I'll go through these in these four sections.

The very first page of the executive summary poses this question: If temperature compensation has been instituted for the most wholesale transactions for the purpose of removing inequity of temperature variations from financial transactions, why has that practice not extended all the way to the California retail consumer.

And I'm sorry, but the report has that question left unanswered. There are people in this room who are retailers who were in my shoes not that long ago. Because they were being sold fuel by the refiners at gross. And they said, it's traded everywhere else in the chain by net. We deserve to get it net, too.

And the refiners relented and changed, rather than have it go through a court case.

The report seems to focus on C stores; 80 percent of the fuel in California is sold through C stores. But there's no real attempt to differentiate the other 20 percent, which is a sizeable portion of the market.

There are large retailers in California who are adding fuel islands just to get people into their store parking lots. And to do that they're hitting break-even, or even going as far as a loss leader. Why in the world would they pass through to the consumer the additional cost if they're not even getting their wholesale costs right now?

Now, I've got to say, this in-the-long-run argument is quite an argument. Because in the long run dinosaurs haven't disappeared, and are probably going to take over when humans get wiped out. Because all the little birdies are dinosaurs, in the long run.

But in the day-to-day operation right now we're still facing this differential in temperature.

The recognition that the $3.2 million in consumer benefits that the report has reverses the preliminary findings of the last public meeting that we had of this group in which it was suggested that there was an RLI of six months. And that the annual consumer benefits would reach 24 million a year for just two counties, I believe it's Fresno and Alameda. Is there an explanation for this shift between the time that we were having open meetings and the time that we -- and now?

Let's see. It still has the $438 million in there. And the part of this calculation thing goes back to the appendix R, which is a theoretical model for information not being square with everybody.

And it seems like appendix R could have California values stuck into it. That if it actually is the model which was used to calculate, that there could be numbers on those curves and axes, and we could actually look at it and see it. And I think it would be an advantage to everybody to actually see the calculation for that.

There's an awful lot of assumptions assuming this and assuming that. One of them was the assumption was that the cost of a new pump with ATC was exactly the same as doing an in-the-field retrofit. And, my gosh, that seems counter-intuitive. It seems like you should get economies of scale of having people put that kit in on the assembly line, not have to drill obvious holes and do it in the rain and snow and everything. And travel to Timbuktu to do the thing.

And if we're going to be changing out normally -- well, we heard that just today a lot of the pumps bit the dust in the '90s. And so if -- oh, well, we're almost ready for a 20-year lifecycle, aren't we?

But even if we only did 5 percent that would give us in the six years coming, that would give us 30 percent of the new pumps coming in having ATC at a much reduced cost to having a retrofit kit put on it. But 100 percent of the estimated costs are for retrofit kits.

There seems to be an awful lot of concern in the labeling section about confusion should ATC be permissive. And, gosh, we've talked to them. They've told us that it's very smooth up in Canada. Of course, it's very cold up there and they eat a lot of maple syrup, so there's no telling what's going on there.

But right now the status quo for consumers in California is that they are totally ignorant that there is a temperature impact on what they're buying. Everybody says it's the most transparent transaction in the world. Right there is the price. They don't tell you that the price is for a different unit of being able to move your car.

And not just the California public, but the American public thinks that this is a fungible product; that one gallon is equal to another gallon. And although the marketers will say, well, we never claimed that. No, but they've never clarified it, either. Well, some of them are; some of them are putting stickers up that say they sell by volume now.

Oh, and speaking of the Canadians, in an early section of this report it talks about consumers were benefitting. Gosh. And the retailers were having a difficult time due to inventory shrinkage. Why didn't they hire you guys to tell them what fools they were?

We've got a mind trust here that could have saved them all that money, because in the long run the Canadians got zippidy freaking doodah, right? Wrong. They did it because they made more money after its adoption. They were selling a littler liter for the same amount of money. We talked about inelasticity of the market. They had a smaller liter, the price did not go down.

Now, you can start singing the Southpark "Blame It On Canada", but they spent real money. They spent ten years doing it. And they're extremely happy with it because the petroleum marketers are making more money than they were before. That's the only reason it was done.

Shouldn't the exact opposite in a warm climate be true? Why would it be a flat nothing here and an advantage to retailers in Canada?

We seem to have identified some things that were really important. And we have always said this, that there was price transparency, information symmetry, more accurate measure and equity. Even the National Weights and Measures Conference, who has a difficult time playing with this topic, has come out unanimously saying it is a more accurate measurement than was previously available. And now it is inexpensively available, and it's not, to quote Ross, it's not if, it's when we go to ATC.

Now, the folks up here who represent our members of PUMP, who is a coalition put together to oppose ATC at any level, at any time, for all time, not just until we have sufficient knowledge, but for all time. We have results that are monetary, but these, if everything at the end of the day is a wash, and it's costing a dime a motorist, wouldn't these benefits to consumers be worth it?

They think so in Germany. They think so. Actually the EU has got recommendations to harmonize temperature compensation across the entire country, they're becoming a country now.

I'm going to keep on going. The assumption of this 100 percent pass-through. This is one of the things that has just really kind of stoked me. Because you only get 100 percent pass-through in two situations, a purely theoretical total competition or a purely theoretical monopoly.

And although California's fuel market exhibits portions of both of these things, it's not. It's neither one of them.

Yes, sir?

MR. MURPHY: I'm Kevin Murphy; I'm an economist at the University of Chicago. And that slide you just put up is just simply wrong, as a matter of economics. I don't know where you learned your economics, but that slide is just not true.

MR. SIEBERT: Okay, --

MR. MURPHY: Neither one of those are sufficient nor necessary to get 100 percent pass-throughs.

MR. SIEBERT: Okay.

MR. MURPHY: I don't know if you're an economist or not, but it certainly is not correct.

MS. DUGAN: Was that in the --

MR. SIEBERT: No.

MR. MURPHY: Believe me, I'm not trying to pull your leg here; that's not correct.

MR. SIEBERT: Oh, you can pull my leg.

We'll take that under consideration, and continue with the makeup of the markets in California. And this I have a little bit more --

I'm a little clearer on this.

Ten percent of the retailers are owned by the refiners; 46 percent are major lease dealers; and 26 percent are branded independents. Only 18 percent are unbranded independents.

The 10 percent owned by the retailers are in a faux wholesale situation because the wholesale price is being handed to them by the refiner. The other two sections there are tied to refiners by long-term supply contracts that are very difficult to buck. Because if one should start doing some independent margin setting on their own, they can find their next month's bill adjusted to make it more in line with the company line.

The 18 percent are the ones who are actually able to go out and find the cheapest supply and set their own margins without anyone looking over their shoulders. And they also add a element of competition where in other situations you don't have so much; you have more of a tacit collusion of keeping the retail high.

Within a monopoly your market power exhibited by one of the people in pricing, the refiners aren't out there refining to meet demand.

They're refining to hit the sweet spot of just below demand so that they can keep the demand there without raising the price. Because raising the price will lower the demand because consumers are price sensitive.

At the same token, if you have a small competitive core of stations around each other, and there is one independent in it, if the independent becomes a branded station or a leased major, the price in that competitive area will go up a nickel. Because that independent has been buying at the cheapest price they can find; they're setting their own margin. And without them there, then competition ceases to be with the remaining stations.

It was the last time that we were here that Jay mentioned that we'd gone from 12 percent to 5 percent margins in C stores' profits. It didn't look that way in the report.

But you can see why they said -- someone previously said that they could try to get the money out of their sales of gasoline. But they get more profits out of $10 of chips and soda than they do $50 worth of fuel. So if I was going to pass through the cost, I'd sure put it on the pop.

As I pointed out last meeting, it's the refiners and the wholesalers that are contracting the C store margins. It's not this sense of overriding competition, because the wholesalers and the refiners are experiencing record profits at this time. And those record profits are being squeezed out of the retailers. That's one of the reasons that the refiners don't want to be in the retail business. They're in the squeeze.

My concluding thoughts is that we should have a report that's internally consistent. The conclusions should flow naturally from well considered analysis. And I see well considered analysis; I see completeness of thought processes in the front of the report. And then I get to the conclusions and I see well, assuming that I'm right, I'm right. It should be based on sound economics and actual practice in the state. And we ought to have the calculations.

And although there will probably be those who'd like to stand up -- these aren't just off-the-cuff comments of mine. We actually will submit a written response. I'll have the references in it from the papers that I picked the information from.

Thank you.

PRESIDING MEMBER BOYD: Thank you, Mr. Siebert.

Next we have Mr. Murphy.

MR. MURPHY: Thank you very much. It's my pleasure to be here today. I guess my goal is to try to make things as clear as possible and tell you how I'm thinking about it.

Not only I'm here representing Pilot Travel Center, Circle K, 7/11, Chevron, BP and Valero, a lawyer can't really speak for them. I can only tell you what I think.

So, let me go through. Let me talk a little bit about the economics of ATC. And I really think the staff's to be commended here. They really correctly identified the key economic issues related to ATC. And the results of that are summarized in tables 7 and 8.

And I have a set of stand-alone copies of 7 and 8 that I can hand around to people that help you look at them. Because you don't want to have to be holding the report open, so it's nice to look at 7 and 8 as I go through.

I'll do a little bit of a summary, and then I'll come back to try to hopefully shed a little light. Because I've heard a lot of things that are kind of in the right direction today. I think it's a matter of putting all the pieces together correctly. And I hope they will become clear eventually to those that need to make the decision as to what the right analysis is in this case.

One of the things they note is that the average temperature of fuel dispensed in California is higher than 60 degrees. That's roughly 71.1. I think most people would agree that's in the right ballpark.

And a shift to ATC will reduce the number of gallons sold, but will not change the amount consumers spend on gasoline. So if you look in table 7, that would be the retained retail motorist benefits, that's a zero in that column.

Second thing they find is that the dispensed temperature varies across location, stations and time. I think this was referred to earlier in terms of discussion of consumer shopping. A switch to ATC will change the information available to consumers.

And the Commission, I think, correctly concludes that the effect of this change is very small. They quantified it to be about 17/1000 of a cent per gallon. I actually think that number's probably a little smaller than that. But we could talk about it. At least they have the right methodology and the right general approach to arriving at the number.

Number three, that the added costs of the ATC equipment will be passed on to consumers in the form of higher prices for fuel, and possibly higher prices for other products. That's their columns labeled initial and reoccurring industry costs.

And number four, they conclude in the final column that the cost of ATC outweigh the benefits. And I'll say that these conclusions, in my mind, based on my analysis, I think are basically correct.

So, how would I think about it, and how do I think the right economic approach to this problem looks like? The first thing to realize is that the implementation of ATC in California would have three primary effects. And it's really important to separate these out, because I think what's causing a lot of confusion is a lot of mixing and matching.

I'll talk about things that are generated over here and use a concept that's appropriate over there. And hopefully we can try to straighten some of that out.

The first one is that there would be a change in the average size of the, quote, gallon. Remember it's not the same gallon, so it's a change from the current 231 to a varying sized gallon that would have, you know, say 233 roughly, up or down depending on temperature, in the case of the ATC equipment, or a fixed California gallon that would be bigger than 231.

The second thing, and again we can analyze this separately from the economic point of view, there would be a change in the information available to consumers. And I think that's been brought up here, that if you did put in ATC consumers would know some things different than they know now.

And I hadn't thought about the possibility of just posting the temperature up there, but that would also provide different information than they have today.

I should say that the staff has really thought about that issue and has tried to quantify those benefits using the methodology in that final appendix. And I agree, it would be great to have numbers associated with that. And I'll submit a whitepaper, and I will put numbers associated with exactly those concepts.

There would be additional costs associated with installing the ATC equipment. So there are three things. One, we're going to change the average size of the gallon. Two, we're going to change the amount of information. And, three, we're going to have some costs associated with equipment.

Each of those things, it turns out, is economically different and requires a somewhat different analysis. And I'll try to explain in a little bit why they're different. But they can be put together to get a systematic analysis. And I think the Commission Staff is well on their way to doing that.

If we just straighten a few things out we'll get there. We'll have a document. We'll have a study that everybody can rely on to get a very good analysis of the situation.

So, the staff report deals directly with each of these in their cost/benefit analysis in those two tables. That's what I talked about moments ago.

Basically, number one is the middle column of zeroes. Number two is the column next to that, which is the increased transparency benefits. And number three is the first two columns of that table. So they really have all the pieces. Let's just think about how we might put them together.

So my primary concern, and my report today is mostly about number one. I got up earlier and spoke on two and three because I didn't really put that in my report. That's why I made some responses. My final paper will deal with all three of them.

The report's discussion of an initial shift in revenue, and then subsequent revenue recaptured, caused by the change in the available volume of a gallon I think is highly susceptible to misinterpretation. And I want to try to make clear why that is.

In fact, this analysis has already been misinterpreted. We see people citing in the press this phantom number that somehow there's this huge benefit. Yet when we look at the report we see that, in fact, that benefit doesn't show up as a benefit. So, it's kind of a phantom number that's out there.

And if you have any questions, please stop me. I'd be more than happy, because I don't like lecturing.

The second is the discussion of the shift in revenue, and in fact, a revenue recapture, in fact, aren't even correct as a matter of economics. You don't want to talk about it that way for reasons I'll describe in a moment.

Market prices for fuel, in fact, are determined by supply and demand. Both of which are unaffected by ATC. And I'm not saying here the markets have to be perfectly competitive. What I'm saying is in any type of marketplace the prices that you see are determined by two things:

What consumers are willing to pay for what it is they want. And what it costs producers, be they competitive, monopoly, oligopolies, whatever, to provide those services. You hold those two things constant and outcomes won't change. Okay.

So we want to know have we changed supply and demand in this market. So, average temperature and the impact of ATC.

As we said before, when fuel was dispensed at temperatures above 60 degrees switching to ATC has two effects. Again, right now we're focused on number one, only, changing the average size of the gallon.

ATC increases the size of each gallon, so consumers require fewer of these new gallons to fill their tank. So, think about me, I'm driving my car up to the station. I'm going to fill my tank until that little handle goes click and it stops going in. I'm going to put it back. So that's what I'm going to do.

But I'm going to take fewer of these new bigger gallons. At the same time, of course, the retailer's cost for those new larger gallons will rise. And, in fact, it's going to rise by exactly the same percentage as the number of gallons I require goes down.

So if the gallons are 1 percent bigger, their costs are going to be 1 percent higher. If they're 2 percent bigger, 2 percent higher. That's something we ought to keep in mind.

However it's critical to realize that the ATC does not change the temperature of the gas or the total volume of the gas that I get. So when I pulled up to the old pump and I put my gas in the pump, wait till it went click, put it back. Come back the next week after ATC has been installed. Stick the hose in there, turn it on; goes click. I get the same exact amount of gas that I used to.

The retailer's cost of that tankful of gas is exactly the same as it was before we put in ATC. The value to the consumer, how much he valued the gas that's in the tank, is the same after we put in ATC.

You see where I'm going here, right? That is it costs the retailer the same to fill my tank. I value filling the tank exactly as much as I did before. I get exactly the same amount of product as I did before. What do you think is going to happen to the price of that tank if it's determined by what consumers are willing to pay and what producers cost them to produce. It's going to be the same for the tank. That's where we're headed.

Since the consumer's value would be given physical volume of fuel is unchanged, and the retailer's cost of that same volume is also unchanged, the market price for that tankful of gas will be unaffected by ATC.

This implies that the amount paid by the consumer for the tankful will be the same. The revenues received by the retailer will be the same. And the volume of gas sold will be the same.

This is the key point here. There is no revenue shifted from retailers to consumers through temperature adjustment. So there is no revenue to be recaptured and no reason for prices of other commodities to adjust.

And that's the key point. When we make the gallons 1 percent bigger, and the retailer charges 1 percent more, the retailer gets just as much revenue as before. The consumer pays just as much as he paid before. The idea that this is a competitive market and you can't pass costs on is irrelevant.

Whether he could pass costs on or not, I'm not passing anything on. The same amount of money is being transacted. His credit card is getting charged for exactly the same amount of money the day after ATC than it was before.

So the idea that the price charged for a tankful would remain unchanged doesn't depend on anybody's ability to pass anything through. It just says what was the market equilibrium price for a tank of gas is the same before and after ATC.

You see what I'm saying? There's no -- people said, well, it's a competitive business. I can't pass it on. What does that mean? It means I can't charge the consumer more than I used to. Well, just adjusting the price to compensate for the fact that the gallon is bigger doesn't require charging the consumer any more than he was before.

And it's not just true for the tankful. The guy who shows up to buy $5 worth of gas, he gets the same amount of gas for his $5 after ATC as before. He just gets 1 percent fewer gallons and 1 percent higher price per gallon. But he ends up with the same exact amount of fuel in his tank. And he comes back to the station the next day, puts $5 more in. And he gets the same amount once again.

That's the point about ATC. That's the point about these phantom dollars. They don't exist. There's no recapture. It's just a matter of saying you're going to charge the same amount for the same thing one day to the next.

So if all that was going on was number one, that we were just changing the average size of the gallon there would be no effect. There would be nothing would happen.

Now, does that mean there's nothing whatsoever to ATC? No. We've still got number two and number three. But that's where our attention should be focused.

Number two is what's the value of the information, how valuable is it. Number three, what's the cost of putting on the equipment, and who's going to pay for it. We worry about two and three.

Number one, to me, is a phantom issue. Number one just says prices are going to adjust to compensate for the average size just because the market equilibrium price for a given volume, what the consumers are willing to pay didn't change, the cost to producers doesn't change, nobody has to change their behavior at all.

People clear on that first one? Because I've got a couple of examples. But if it's clear I'll just skip them. Because I can -- it's up to you guys if you want me to keep going. I know this has been a long day for you guys. I don't want to drag you through it if you don't need it.

PRESIDING MEMBER BOYD: Well, I'm worried about the audience more than I'm worried about --

(Laughter.)

MR. MURPHY: You guys want to hear it? Okay. I'll give you a little example. So, my point is consumers pay the same amount for gas, retailers earn the same profits, supply and demand remain in balance.

The key here is this whole idea that aren't markets so competitive that it couldn't pass it through or wouldn't the oil companies be willing to absorb anything. There's nothing to be absorbed. When you simply make the gallons 1 percent bigger and people charge 1 percent more per gallon, the dollars don't flow anywhere. They don't go to the consumer, they don't flow back to the retailer, there's nothing for the wholesaler to offset, there's nothing for anybody to adjust. Everybody's where they started.

We just played a little musical chairs and everybody got back in their seat.

All right. So the direct revenue effect

will be zero. And that's why there's a zero in that middle column in my mind. The zero in that middle column simply flows from that simple fact.

All right. So, my example was simple. You're dispensing fuel at 75 degrees. I chose that because that's a 1 percent volume difference at 75 degrees, $2 per gross gallon. Consumer purchases enough gas to fill his tank. In this case I said it's 20 gallons, $40, with a margin of 14 cents per gallon, the retailer earns a variable profit of 280. And the fuel had the cost of 3720 for the gasoline dispensed.

So, now what happens when you switch to ATC, as I said, consumer buys the same total volume of gas at the same total price which would fill his tank, because the thing stops filling at exact same point it would have otherwise.

The consumer now buys 19.802 net gallons at 2.02 per gallon. The consumer spends the same 40 bucks. The retailer still gets 37.20 since the gas to fill the tank costs the same amount the day after ATC as it cost the day before. See, that's the other key. The cost to fill that tank is the same as it was.

And this leaves the consumer and

merchant in exactly the same position as before. So there's no reason for any of them to change their behavior. Retailer doesn't want to change his Twinkie price because he's found his gas business is the same as it was.

The consumer drives just as much as before because a tank of gas costs him just what it cost him the day before. The guy buying $5 worth of gas gets just as much gas as he got before. Nobody's going to change their behavior. Whatever cleared the market with supply and demand clears the market still.

There's no revenue to recapture or increased costs to be passed through on other items. That's the bottomline.

You can also do it in the aggregate. Same result can be looked at sales in the aggregate. I'm just going to skip this. That was my last slide.

So, it's been a long day, so that was all my presentation that I had. And I just wanted to make that one simple point. I'll go back a little bit on two and three because, you know, I'm trying to keep it brief. So I hope that earned a little bit of time.

On number two I think the Commission has the right general thoughts here. We just have to work what's the right question. And I think, Commissioner Douglas, I think you were on the right line here, is that there really is an issue here about information that has to do with situations where the consumer has a choice. And maybe that choice is influenced by his lack of information. I think that's the place where you'd want to think about it.

Those numbers I still don't think are very big, but that's where you want to do your thinking. Because if number two is going to have value that's mostly where it's going to be.

The variation of the year is actually trickier because it turns out that you have to worry, not just this fuel varying because of temperatures, fuel varying for other reasons.

And what can look like it makes information better could actually make information worse if other factors were actually causing summer fuel to have more energy density rather than less.

In some sense you'd be giving half the story and actually making things a little worse.

You've got to take that into account, but that framework, that's what's nice about that framework. That framework allows you to do that. That framework allows you to take all these things together and say what's the economic value of information.

And I've heard a lot of discussions today about information. And I agree, information is the fundamental change here. The size of the gallon is a red herring. The information is the place that we want to look at.

And there's a value to information, which is what the Commission tries to calculate in number two. There's a cost of information, which is what the Commission tries to calculate in number three. Which is how much does it cost to install, and who's going to pay.

Now, unlike my discussion of number one, where the idea that the price would adjust, seems to me very straightforward.

Number three, you have to think a little harder about pass-through. Now, because it's not what we call in economics a marginal cost, it doesn't affect the cost of each gallon gas. We know from empirical evidence -- people asked earlier about empirical evidence -- if you look at the relationship between the retail price and the wholesale price, you find it's a very very tight relationship.

And I think I'll put in my report the results. You were asking earlier about evidence on pass-through. You do that regression for California it's almost exactly 1. That is, you do something that affects the cost of a gallon at wholesale, it's going to affect the price of a gallon at retail penny-for-penny. So we'll get back to that.

But for things that we call in economics fixed costs, that is things like changing the cost at the pump, which I don't pay for it every gallon I pump, I just pay for it once, you got to think harder about those pass-through issues.

Now, the Commission talked a little bit about well, it's unclear that they can pass these costs through because they look at things like, say, well rent went up, wages went up, and credit card fees went up. And we didn't see all that showing up in gasoline.

But remember, those costs -- the costs of all retailers. That is, anybody who wants to sell Twinkies when the wage rate goes up, or the rent price goes up, they're going to have their costs rise, too.

And it's not surprising, therefore, that you see the prices of all commodities rising when those general costs go up.

Our question here is if you do something that only raises the cost of fuel dispensing, will that show up in Twinkies. And the reason it's unlikely to show up in Twinkies is because there are a lot of people who sell Twinkies who don't sell gasoline. And their costs don't go up when you mandate ATC.

And those Twinkies sold at the gas station have to compete against Twinkies being sold at the drug store, in Walgreen's or SaveOn, or wherever else you go to get your little sugar fix, you know. They got to compete on that margin.

And therefore, it's not surprising that we don't see a concentration of those other costs on fuel. We wouldn't expect it. Okay.

I still think the vast majority of things like retrofit costs are going to show up on fuel because exactly that, it's a cost that's only borne by fuel sellers. And so the only price in the market that could really absorb that greatly would be fuel. Most of the other commodity prices are going to be pinned down with competition with nonfuel sellers, which is why you're going to see most of it on fuel.

But I mean 100 percent on fuel. But remember, this is only for the retrofit cost. Number one cost of 438 million or whatever that number is, that's all going to show up in fuel because there is no pass-through. It's just keeping the status quo.

So that's what I had to say. I'd be happy to answer any questions that you guys might have.

PRESIDING MEMBER BOYD: Thank you. Any questions?

MR. MURPHY: Thank you.

MS. DUGAN: One.

PRESIDING MEMBER BOYD: One question.

MR. MURPHY: Sure.

MS. DUGAN: Sorry. Judy Dugan. You're lucky we all have to catch planes here. First of all, you talk about the transaction between the retailer and the customer as though it's a transaction in a vacuum.

But it's really a transaction, it's a very complicated business, you know, selling fuel. It starts in Tajikistan at an oil field. Then it comes down ultimately to the retailers, so that everybody along the way has an interest in selling the gasoline.

MR. MURPHY: I understand. But think about what I just said. When the volume adjusts and the price adjusts to compensate, nothing real happens at retail.

So no matter how complicated the linkages are out there, if there's no action in the first instance, how can it have ramifications back that long chain of events?

MS. DUGAN: There's a ramification on the price sign, as you well know.

MR. MURPHY: No, there's not a ramification, because what consumers care about is how much does it cost to fill my tank. What I care about, if I put $5 worth of gas in my tank, is not how many gallons it says on the sign; how far can I drive on that five gallons --

MS. DUGAN: That what --

MR. MURPHY: -- that $5. And that

doesn't change when you get one-for-one compensation on the price for the volume.

MS. DUGAN: That may be partially true, but I would --

MR. MURPHY: What do you mean partially?

MS. DUGAN: Because people look at the price sign when they buy gasoline.

MR. MURPHY: And what? Then they just drive on air? They just drive and it keeps driving because they thought it was cheaper than it was?

MS. DUGAN: It's also a matter of will costs be borne anywhere else in the system --

MR. MURPHY: They won't be because there's no cost --

MS. DUGAN: -- aside from the retailer.

MR. MURPHY: -- to be passed back.

MS. DUGAN: Yes, there is. This is semantics.

MR. MURPHY: No, it's not semantics. That's what I'm telling you, focus on the ATC cost. Because the --

MS. DUGAN: I am.

MR. MURPHY: -- focus, the ATC cost, I'm not talking about --

MS. DUGAN: The 4-3, we're looking at the 4-3, it's right here.

MR. MURPHY: No, no, 4-3-8 is just, create the 438 in an instant and it evaporates because of price compensation. Nobody outside the system is affected whatsoever. Consumers buy just as many gallons. Retailers sell just as many gallons.

I just don't -- for the life of me --

MS. DUGAN: I -- no, nobody says that it -- are you saying it will come out exactly equal at every station all of the time every day?

MR. MURPHY: No. That's what I'm not. That's a good point. Because it doesn't. That's only on average. And that's why you separate number two, because the fact that it varies across station and varies across time is exactly the economic issue addressed by their number two.

MS. DUGAN: If it varies day to day from station to station, that doesn't mean that it's always going to net out to the dollar. It does not mean that some portion, some portion, can be retained by the consumer.

But, let's go to --

MR. MURPHY: I know, I'm just saying --

MS. DUGAN: Let me go to --

MR. MURPHY: Let me -- I'm supposed to answer the question, so I'll answer the question. Which is that is exactly -- your concern that variation, be it over time, across stations, could create some gain or loss for different parties is exactly the economics of number two.

So that's why we got to make number two in the analysis that the staff did as clear as possible. Because that is what that type of economics is built to address.

MS. DUGAN: You're also saying that it is a simple law of economics that this will be passed through, period.

MR. MURPHY: There's no -- I -- I --

MS. DUGAN: You expressed it in very simple and inevitable terms.

MR. MURPHY: Because I said it's not passed through. See, pass through, it means what causes people not to be able to pass through. And that's that the other side of the market resists, right? The reason somebody can't pass it through is because the other side of the market resists.

When we do something that simply keeps the total dollars transacted for the same amount of product unchanged, neither side of the market has to absorb anything. And that's why you see the change you do. That's why it works the way I say.

MS. DUGAN: So there is no ultimate cost, in your analysis, to the retailer -- or the wholesaler?

MR. MURPHY: There is because the equipment costs something.

MS. DUGAN: But the assumption, the CEC's clear assumption is that that would be also passed on.

MR. MURPHY: Well, that's -- the CEC has made that assumption. I think we should work on that and figure out how much would be passed. But that is on -- be careful. That's not the 438. The 438 is a side --

MS. DUGAN: I understand the difference, believe me, yes.

MR. MURPHY: Okay. So this is on the cost of the equipment. I think, and based on the logic I put out a minute ago, and we should verify empirically to the extent we can, because these are only costs for fuel sellers it will be passed through.

Also you've got to be very careful because I didn't bring this up, but it actually is a potential issue. The rise in the cost of ATC equipment is the most acute for the retailers that sell the lowest volumes. You would agree with that?

MS. DUGAN: That's so -- that is so done with.

MR. MURPHY: No, no, no, wait a minute.

MS. DUGAN: Accept that they shouldn't have to do it at all.

MR. MURPHY: So within a urban area you're going to exempt the guys who sell less?

MS. DUGAN: Very low volume, mom-and-pop, mechanical pumps, fine with me.

MR. MURPHY: Whichever group you exempt the problem you always have is the guys who dispense the least gas have the biggest cost increase. If those are the marginal retailers, if the guys who are on the margin of being in the business have their costs go up more than the infra-marginal people, you can have pass-through more than one-to-one. You got to be really careful what you wish for here, --

MS. DUGAN: It does --

MR. MURPHY: -- because this gets back to the point earlier, people talked about competition implies one-for-one pass-through. Be careful. That's only true for uniform cost changes.

You get a cost change that affects the marginal suppliers more than the infra-marginal suppliers, they can go the other way. And this is a market in which you know the marginal guys are going to be the guys who sell less gas. So you're raising their costs the most.

MS. DUGAN: This has been discussed at length in this forum. And consumers have no problem with giving such people more time, some help, some -- a pass.

MR. MURPHY: But who's -- so your view is that the informational benefits are large enough that they more than pay for the cost? Which I think we should -- if that were true we should be able to find that using the methodology laid out --

MS. DUGAN: I do not accept the full-cost pass-through.

MR. MURPHY: Okay, let's assume that we did the debate the way you want, which I'm all for figuring out the right answer here. Which says, look, let's quantify number two. What's the value of the informational benefits. Put that over here.

Remember, --

MS. DUGAN: If there --

MR. MURPHY: -- remember only some of that goes to consumers. A lot --

MS. DUGAN: If there was not a high value to that informational benefit you would never see a truckstop in the desert with a huge tank painted black.

MR. MURPHY: No, that's just not true. Again, this gets back -- somebody brought up Canada earlier. The incentives of an individual retailer and the incentives of the group or the market, as a whole, are not the same.

In Canada you got voluntary adoption because each retailer thought he, individually, could get a leg up on everybody else. But, of course, when everybody does it, just like price cuts and everything else, it doesn't pan out the way the individual guy wants.

And that's the same with the tank in the desert, --

MS. DUGAN: I agree, I agree. And that's why I beg the Commission not to demand that a law be passed banning voluntary sales. I mean let the retailers who may see this as a benefit to consumers and to them give it a try.

The Division of Measurement Standards has made it clear they have vast experience with other temperature compensated fuels, including LPG. That they are perfectly capable of regulating this form.

And passing a law that will prevent them from doing this until, quote, sufficient regulation is in place, is -- it's a word so vague that we know that this ban will never be lifted if it is ever passed.

So, to me, this is the crucial thing that the Commission wishes you can do here is to say, do not ban it. I mean, there are people who may want to do this. In fact, there has been one partial attempt to try it that was withdrawn awaiting the conclusions of the Commission.

But there is no reason to stop those who wish to do it from doing it. The only alternative, I believe, to at least allowing it to go forth voluntarily would be to set a statewide reference temperature. Because then people would be getting a generally more fair amount, generally, throughout the state.

It's very much second best, but preventing a ban, preventing a law that stops this from even happening on a voluntary basis, once it is in place will be very difficult to remove in the legislative arena.

So, that's all.

MR. MURPHY: Thank you, I'll try to address -- oh, we've got one more question. Sure.

MR. SIEBERT: We'll skip the tanks painted out in the desert, although it does happen. We found 127 of them so far. I asked my membership to send me pictures of them. Beautiful.

(Laughter.)

MR. WILLIAMS: We would like to see those.

MR. SIEBERT: Oh, okay, I'll send them to you.

(Laughter.)

MR. WILLIAMS: -- locations --

MR. MURPHY: Don't take anything I've said to say that wouldn't happen, right.

MR. SIEBERT: No, no, -- no, no.

MR. MURPHY: There's nothing in my analysis --

MR. SIEBERT: No, but --

MR. MURPHY: -- that says nobody would do that.

MR. SIEBERT: -- even with -- there are other things that impinge on the average. And the Conference of Weights and Measures, even Ron Hayes from Missouri, has acknowledged that West Memphis, Arkansas is a hot spot. It's nine miles from a Williams refinery.

I can tell you that Bakersfield, California is a hot spot. Who was it -- Flying J bought the refinery there. And when I get reports from California of hot fuel, I say don't happen to be in Bakersfield, do you. And they say, um-hum.

And we're not talking the 1 percent. This average thing, we've had fuel as high as 110, 115. The highest one, inexplicably, was Boulder, Colorado at 118. Go figure.

We're talking a lot more than the average. But they don't know how to handle these hot spots. They are putting out fuel. It is not dwelling in the tanks, it is being sold a tanker an hour. And it's coming in to them at 110, it's going out to the public at 108, and we're talking 4 percent change in volume there.

MR. MURPHY: But isn't that precisely the kind of thing you'd want to quantify the value? And that's what number two does. I mean if you do number two correctly that calculates exactly the gain or loss associated with what you're talking about. That's what I'm saying.

This has nothing to do with number one. This is all about number two. And your --

MR. SIEBERT: Love number two. I'm all for number two.

MR. MURPHY: Okay.

MR. SIEBERT: Just know that the averages will still impact citizens.

MR. MURPHY: Any more questions? Thank you very much.

PRESIDING MEMBER BOYD: Thank you. You did mention there are other things that confound this issue. And I don't want to go into those --

(Laughter.)

PRESIDING MEMBER BOYD: I immediately thought of the difference in the energy density of winter fuel versus summer fuel, et cetera, et cetera. And I'm feeling lost in the static here a little bit.

All right. Well, I don't see Gordon, but this is the time for any other public comment. Anyone else who'd like to -- or now starts public comment. Although there's been lots of public comment.

MR. ROBINSON: Do you want me here or do you want me over there? Here.

My comments hopefully will be simpler, no bigger gallons, no smaller gallons, and certainly no math.

My name is Tom Robinson; I am President of Robinson Oil. Robinson Oil owns and operates 34 Rotten Robbie stations and convenience stores in the greater San Francisco Bay Area. We're headquartered in San Jose.

Robinson Oil is a family business; I'm the third generation. The fourth generation is now active in the business. I started in the business in 1974. My college degree is in economics.

I provide this information to show that, one, our family business has survived for awhile. I have some formal education to discuss economic matters. I have experience and hopefully some understanding regarding how the petroleum retailing industry functions in the real world.

Early in my career I had the opportunity to attend Bay Area Air Quality Management District hearings. At that time we were struggling to understand what we needed to do to comply with new vapor recovery requirements and how we were going to afford these expensive upgrades. I guess some things really haven't changed over 30 years.

In California petroleum retailers have had the opportunity to comply with many expensive mandates. Some of the mandates have definitely provided societal benefits. In some instances, let's say, the benefits were less than promised.

Through all of this the industry has survived and prospered. Maybe we have not prospered as much as many of the companies in my home area of Silicon Valley, but the industry is still here and in reasonable health.

So what does this suggest? It suggests that the industry was able to pass on these expensive mandates to consumers. Not every company and every station was able to pass on the mandated costs. Some stations are gone, but the stronger and/or better retailers survived.

Stepping back, this is exactly what basic economic principles would predict in a competitive industry. And petroleum retailing is a local competitive industry. We do not compete against retailers from Tennessee, from Mexico or Canada.

In a local competitive industry expensive mandates on all retailers are passed on to consumers, because if they are not, businesses become unprofitable and they go out of business.

I guess it's also not a surprise that California usually has the highest gas prices in the nation.

I congratulate the Energy Commission for understanding this economic reality, and reaching the conclusion that ATC will not be an economic benefit to consumers. Instead it will be an economic cost. Even though I believe the Energy Commission understands the economic realities of competitive industry, I believe the cost to the consumer is significantly understated in the report. If, for no other reason, than costs are always under-estimated.

Another concern that I have is that

nowhere in the report, or even today, did I find that the true winner was identified. The only group that will clearly receive benefits is made up of equipment manufacturers and service companies.

I think identifying this group helps clear up the gain and loss equation. This group receives the benefit. It gets the money.

Retailers pay manufacturers and service companies and pass through the costs to consumers. Ultimately consumers will pay the manufacturers. That's how it works.

If I look at this issue solely from a selfish viewpoint of what is good for my company, Robinson Oil, and I emphasize solely from a selfish viewpoint, I don't care if temperature correction is mandated or not.

As I noted earlier, Robinson Oil has survived expensive mandates. I'm confident these costs will be passed -- these costs, if they were mandated, will be passed on to the consumer, also.

With that said, I would prefer that the state did not burden my customers unnecessarily. But if the state cannot help itself and is bound and determined to inflict this on the public, please, please make it mandatory. And have it all go into effect at the same time.

It's obvious that this is a confusing issue. There's much information out there now. It cannot be explained with signage. I do not believe the DMS can develop a permissive standard that will not be confusing. Please do not create public confusion. Public confusion is never a benefit.

In summary, I hope the state does not ultimately decide to require temperature correction. It will only add costs to the system, which will be paid by consumers.

Thank you for this opportunity to make comments, and I'd be more than happy to answer any questions.

PRESIDING MEMBER BOYD: Thank you for your comments. I have no questions.

ASSOCIATE MEMBER DOUGLAS: No questions.

PRESIDING MEMBER BOYD: Thank you.

MR. SEARLES: Hello. My name is Prentiss Searles; I'm with the American Petroleum Institute. I'm the Marketing -- Manager there. API is as trade association that represents nearly 400 member companies involved in all aspects of the oil and natural gas industry, from exploration and production to retail marketing and distribution.

API members, as has been pointed out earlier today, own less than 5 percent of the approximate 164,000 retail stations in the country, and operate less than half of the retail stations that they do own.

API members brand approximately 40 percent of the retail stations in the U.S. through various branding agreements.

As a point of clarification, when a station bears a particular API member's brand, it does not mean that the API member company owns or operates the station. The vast majority of branded stations and owned and operated by independent retailers licensed to represent that brand.

According to NACS more than half of the 164,000 retail stations in the U.S. are owned by an individual or a family.

API has participated in previous workshops and appreciates the opportunity to make this brief presentation to you. And here's what I've got.

By law, since the early 1900s retail sales of motor fuel in the U.S. have been made based on a single size of volumetric gas, defined as 231 cubic inches without reference to temperature, as we've heard in very excruciating detail today.

These standard size gallons are defined by law, reflected in dictionaries, and have long been used in retail trade. Some parties have suggested that retail sales of gasoline and diesel be based on temperature-adjusted gallons.

Temperature-adjusted gallons change in size, becoming larger and smaller as the temperature of the fuel sold rises or falls. The adjustment in the size of the gallon sold would be accomplished using the ATC device described earlier today, installed at retail motor fuel dispensers.

Those in favor of ATC propose two possible methods of its implementation. As you've heard, some advocate a mandate that every retailer install ATC equipment to adjust the measurement of all fuel dispensed.

Others advocate a permissive approach in which each retailer could choose whether to install ATC devices at their stations. Still others are against ATC and oppose any change to current practice of retail sales of gasoline and diesel based on standard volumetric gallons.

API has, and continues to rely on the National Conference on Weights and Measures to make the best decision as to whether ATC is necessary or not. We believe that before any changes are made on how the industry sells and the consumer buys more than 15 billion gallons of gasoline and 3 billion gallons of diesel in California, that that decision should be done with the best and most complete information available.

One of the questions that is asked in the CEC report is are consumers losing millions of dollars, as some allege, because there's an automatic temperature -- because there is no automatic temperature adjustment of retail gasoline sales.

Simply put, the answer is no. Consumers purchase motor fuel dispensed in a uniform measurement that is developed and approved by the NCWM, adopted by state laws and regulations, and sold in the competitive marketplace in which prices reflect the range of factors such as supply, demand, distribution logistics and temperature.

Consumers are able to compare advertising and signage at retail stations and decide which product they will purchase. By definition consumers aren't losing money because they are receiving a gallon of motor fuel for every gallon of motor fuel they purchase. The very unit posted at the pump, and the very unit retailers are legally required to provide throughout the United States.

The retail gasoline industry is highly competitive. According to NACS, and you've heard this statistic already, a consumer will turn across a busy highway to save a penny on a gallon of gasoline. The consumer has a completely transparent marketplace today.

I simply urge you to fully understand all the potential issues and concerns that have been raised here today. Thank you.

PRESIDING MEMBER BOYD: Thank you. Do we have anyone else?

Well, we had quite a public discussion earlier.

(Laughter.)

PRESIDING MEMBER BOYD: Gordon, is there anything else you desire from this body of people, since we have them trapped here for a long -- nothing.

Well, then I'm going to thank everybody. Appreciate, I think we heard a lot today.

Yes, sir?

MR. McKEEMAN: Response date? Has there been a decision made on what --

PRESIDING MEMBER BOYD: It is what it is.

MR. McKEEMAN: Okay.

(Laughter.)

PRESIDING MEMBER BOYD: We have to live with what we publish, in my opinion.

So, okay, thank you, all. I say, we learned quite a bit today. We heard a lot we heard before. We've been fooling around with motor fuel for 20 years, and in all that time this was an interesting one.

(Laughter.)

PRESIDING MEMBER BOYD: Thank you, all, and be safe out there.

(Whereupon, at 3:10 p.m., the workshop was adjourned.)

CERTIFICATE OF REPORTER

I, PETER PETTY, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Workshop; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said workshop, nor in any way interested in outcome of said workshop.

IN WITNESS WHEREOF, I have hereunto set my hand this 26th day of December, 2008.